NUEXCO

Monthly Report

March 1991 Number 271

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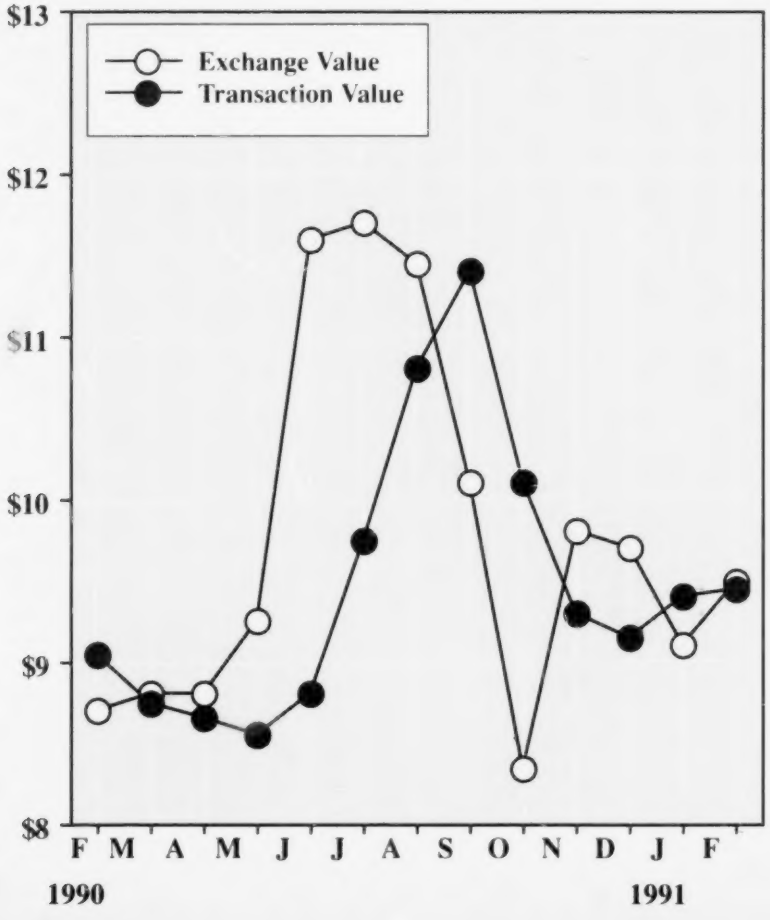

NUEXCO

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1991 NUCLEAR FUEL MARKET STUDIES

NUEXCO's annual market study, titled *NUCLEAR FUEL MARKET ANALYSES AND PRICE TREND PROJECTIONS – 1991,* will soon be complete. This edition will provide a comprehensive analysis of the worldwide nuclear fuel market. And, for the first time, information on Eastern Europe and the Soviet Union will be included.

This report, analyzing the entire front-end of the nuclear fuel cycle, is a valuable reference document. Covering the period 1991 through 2005, the study thoroughly discusses the following topics:

- Installed Nuclear Electric Capacity and Performance
- Inflation and Currency Exchange Rates
- Natural Uranium
- Conversion
- Enrichment
- LWR Fuel Fabrication

The study will be available in two versions – *Summary Report* and *Extended Coverage Report* – differing only in the amount of detail provided. The summary report provides regional, aggregated data, whereas the extended report contains specific reactor and production center data.

In the fall of each year, an update to the *Extended Coverage Report* is released. This update includes new and previously unavailable information to revise and augment the spring report.

AVAILABILITY OF THE REPORTS

The reports will be available for release in May 1991.

FOR FURTHER INFORMATION

For additional information, please contact Treva Klingbiel or another NUEXCO Information Services representative at (303) 899-4500.

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- **Status of Anti-Nuclear Policies Worldwide**

Many obstacles must be overcome in order for nuclear power to be ready for a resurgence. Legislative moratoriums and other formal restrictions have raised some of the biggest obstacles to the recovery of the nuclear power industry. This article presents a country-by-country summary of such policies.

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To Our Readers

NUEXCO is pleased to announce the opening of our new service location in Sydney, Australia at the offices of our affiliate, CONCORD. The address of this office is as follows:

CONCORD/NUEXCO
9th Floor Kyle House
27-31 Macquarie Place
Sydney, New South Wales 2000
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Telephone: (61-2) 252-4055
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Mr. Brian L. Harcourt, in such office, serves as Area Director of Operations for Australia for CONCORD and has been involved with CONCORD's semi-conductor activities for several years. He has a background in banking and finance and was Chief Executive Officer of Western Underwriters Pty. Limited, a leading Western Australia insurance and finance group. His corporate experience includes finance, property development, insurance underwriting, international business, and company development. His most recent position has been as Co–founder and Chairman of Ramtron Holdings Limited, an international semiconductor manufacturer with manufacturing operations in Colorado Springs and offices in New York and Sydney. Brian's international experience and familiarity with Australian business practices will be utilized by NUEXCO where needed in our service to our Australian customers.

Dr. Peter Solomon will also be representing CONCORD and NUEXCO in Sydney. Dr. Solomon has been involved in the minerals industry for over 30 years and also has a broad consultancy in the general field of technology development and transfer. He received his bachelors and masters degrees from Queensland University and a PhD from Harvard University. His experience has included both commercial and teaching positions. Peter has worked as a geochemist and research officer for various mining companies, a consultant on mining and technology to government and to private enterprise, and as a advisor to the government on uranium affairs. His work has involved 49 overseas commissions covering 21 different countries. Peter's experience with mineral exploration & development, technology assessment, foreign investment legislation, and worldwide natural resource development policies make him a valued addition to our Sydney office.

NUEXCO is also pleased to announce the following addition to our Denver office:

Mr. Ed Rutkowski has accepted a position with NUEXCO Information Services as a Senior Enrichment Analyst. Ed has over 16 years of experience in the enrichment field and most recently served as DOE's Assistant Manager of European Marketing and Sales. During the past eight years, he has worked in the development of policies, strategies, and activities related to DOE's overall marketing and sale of uranium enrichment services. Prior to this time, Ed worked in DOE's Gaseous Diffusion Operations Branch and the Enrichment Planning Branch.

* * *

NUEXCO will be hosting a hospitality suite at the USCEA Fuel Cycle '91 Conference to be held March 24-27 in Phoenix, Arizona. We look forward to seeing you there.

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In Memoriam

It is with deep sorrow that we must announce the death of John M. Vallance, a Senior Analyst for NUEXCO Information Services. John died suddenly on the morning of February 25 of a heart attack.

John was a truly special person. His years of experience and thorough knowledge of the industry made him an invaluable resource for the company; his caring, friendly nature made him a pleasure to work with. John earned a Chemical Engineering degree from Rensselaer Polytechnic Institute in New York, and a Certificate of Completion from the Oak Ridge School of Reactor Technology. He was the Assistant to the General Manager for Reactor Evaluation for the US Atomic Energy Commission from 1955 to 1967. He then joined the consulting firm of Pickard, Lowe and Garrick from 1967 to 1983 where he was responsible for analyzing all aspects of the fuel cycle, focusing particularly on enrichment. John then accepted the position of president of Colorado Nuclear Corporation, a well-known nuclear industry consulting firm. John joined NUEXCO in 1987, and was responsible for analyzing nuclear power programs worldwide, developing and refining NUEXCO's fuel requirements and reactor database, as well as being a major contributor to NUEXCO's annual Market Study and numerous consulting projects.

John was 60. We join his wife Joan, his three children, one grandchild, and his many friends and colleagues in mourning his death. He will be deeply missed.

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Market Values Summary

NUEXCO Market Values	This Report February 28, 1991	Last Report January 31, 1991	12 Months Ago February 28, 1990
EXCHANGE VALUE[1]	**$9.50**/lb equivalent U_3O_8	$9.10	$8.70
UF_6 VALUE[2]	**$27.75**/kg U as UF_6	$27.50	$25.25
LOAN RATE[3]	**3.5%**/annum	3.5%	3.5%
CONVERSION VALUE[4]	**$1.45**/lb U as UF_6	$1.45	$1.50
SWU VALUE[5] **(0.3 % tails assay)**	**$50**/SWU	$51	$50
TRANSACTION VALUE[6]	**$9.45**/lb equivalent U_3O_8	$9.40	$9.05
Transactions	**18**	18	22
Months	**3**	3	3
Millions of Pounds	**2.6**	3.1	5.8

DEFINITIONS

1 The **Exchange Value** is NUEXCO's judgment of the price at which transactions for significant quantities of natural uranium concentrates could be concluded as of the date indicated.

2 The **UF_6 Value** is NUEXCO's judgment of the price at which spot and near-term transactions for significant quantities of natural uranium hexafluoride could be concluded as of the date indicated.

3 The **Loan Rate** is NUEXCO's judgment of the annual interest rate at which uranium loans could be concluded as of the date indicated.

4 The **Conversion Value** is NUEXCO's judgment of the price at which spot and near-term transactions for significant quantities of conversion services could be concluded in the secondary market as of the date indicated.

5 The **SWU Value** is NUEXCO's judgment of the price at which spot and near-term transactions for significant quantities of enrichment services could be concluded as of the date indicated.

6 The **Transaction Value** is a weighted average price of recent natural uranium sales transactions. The calculation is based on prices paid in:

a) Transactions closed within the previous three month period for which delivery is scheduled within one year of the transaction date;

b) At least ten transactions;

c) Transactions involving a sum total of at least 2 million pounds equivalent U_3O_8.

DERIVATIONS AND COMMENTS

- All **Market Values** are expressed in terms of US$.
- All **Market Values** are based on:
  - Data from recently completed transactions.
  - Data from pending transactions.
  - Firm bids to buy or borrow, and firm offers to sell or lend.
  - Prices purchasers or rates borrowers have expressed a willingness to pay, but for which NUEXCO is not aware of firm bids to buy or borrow and prices sellers or rates lenders have expressed a willingness to accept, but for which NUEXCO is not aware of firm offers to sell or lend.
- Prices associated with deliveries under old or renegotiated contracts or other than arm's-length transactions are not included in the determination of these **Market Values**.
- In the determination of prices, NUEXCO does not consider charges for transportation other than that customarily provided by suppliers.
- The prices of services or materials delivered under long-term contracts with primary suppliers are not considered in the determination of the listed values.
- For the **SWU Value**, NUEXCO converts SWU prices at varying tails and product assays to equivalent SWU prices at a tails assay of 0.30 weight percent U^{235} and a product assay of 3.0 weight-percent U^{235}, assuming feed costs corresponding to the NUEXCO **Exchange Value** and **Conversion Value** determined as of the same date.
- In calculating the **Transaction Value**, NUEXCO does not account for the price of uranium delivered in connection with contracts which call for "market price" mechanisms. This exclusion applies particularly to contracts in which delivery prices are expressed as a function of future **Exchange Values** or any other indeterminate variable. Also excluded from the calculation are any other transactions in which the delivery price is defined in such a way that it can not currently be determined.
- The sample time for the **Transaction Value** is extended as necessary to satisfy the minima for the number of transactions and quantity of material. Other currencies are converted to US dollars using conversion rates in effect on or near the transaction date.

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MARKET REVIEW

FEBRUARY MARKET REVIEW

(as of February 28, 1991)

OVERVIEW

The uranium market firmed during February, but ample supplies and cautious buyers limited the extent of the price increase. The Exchange Value climbed $0.40, to $9.50 per pound U_3O_8. The rise in the concentrates market influenced the UF_6 market, but the February 28, 1991 UF_6 Value rose only slightly, to $27.75 per kgU as UF_6. Uranium sales volume increased over January's level of just under one million pounds, as 1.8 million pounds equivalent U_3O_8 changed hands in eleven transactions during February (**Table 1**).

The Loan Rate and Conversion Value remained unchanged at 3.5 percent per annum and $1.45 per pound U as UF_6, respectively. No loans are reported, but three conversion sales totalled over 1.5 million pounds U.

The SWU Value declined one dollar, to $50 per SWU. Despite some increase in demand, aggressive competition among sellers led to the price decline.

NATURAL URANIUM AND CONVERSION

The **Exchange Value** rose four percent as of February 28, to **$9.50** per pound U_3O_8. With near-term demand increasing, sellers were less aggressive in their pursuit of new business, allowing prices to move higher. Buyers, however, anxious to avoid a repetition of the mid–1990 price run up, remained generally cautious, which served to moderate the extent of the price rise. Price levels moved up quickly in early February, but buyer and seller behavior led to a leveling of the market during the rest of the month.

Table 1
NEAR-TERM URANIUM SALES SUMMARY

	February 1991		Year-to-Date	
	No. of Sales	Volume[1]	No. of Sales	Volume[1]
Concentrates	8	1.2	11	1.7
Natural UF_6	0	0.0	2	0.5
EUP	3	0.7	3	0.7
Total[2]	**11**	**1.8**	**16**	**2.8**

[1] million pounds equivalent U_3O_8
[2] columns may not total due to independent rounding

The eight natural uranium sales reported for February all involved concentrates, and totalled nearly 1.2 million pounds equivalent U_3O_8. Although several buyers considered UF_6, all elected to purchase concentrates. The eight buyers were from the USA; producers made four purchases, utilities made two purchases, and intermediaries accounted for the remaining two. No long-term uranium transactions are reported.

* * *

The **UF_6 Value** rose $0.25, to **$27.75** per kgU as UF_6. This small (one percent) increase reflects the influence of the concentrates market on the UF_6 market, as no UF_6 transactions are reported. UF_6 had been selling at a premium to the sum of the values of its components—concentrates and conversion. This month's increase in the Exchange Value was larger than the increase in the UF_6 Value, that is, the market adjusted to this premium, and UF_6 is now selling at a small discount.

UF_6 prices are also being influenced by developments in the market for enriched uranium product (EUP). Activity in the EUP market has increased recently, and consequently, the market for its feed component is affected. The feed component of EUP may be discounted relative to the price for natural UF_6.

Table 2
NEAR-TERM SUPPLY/DEMAND SUMMARY

	Active Supply[1]	Active Demand[1]
• Uranium (thousand lbs equivalent U_3O_8)	5,375	2,485
• Supply/Demand Ratio:	2.2	
• Loan (thousand lbs equivalent U_3O_8)	9,340	0
• Conversion (thousand lbs U as UF_6)	920	630
• SWU (thousand SWUs)	575	340

[1] Supply and Demand tables in the Market Review section of this Report provide details for each category.

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The **Transaction Value** increased slightly, rising $0.05, to **$9.45** per pound U_3O_8 based on 18 transactions over 3 months involving 2.6 million pounds equivalent U_3O_8. Compared to the volatility of the past year, prices in the last few months have not exhibited extreme price swings. The Exchange Value for the past four months has moved within a $0.70 range. This relative stability has led to a convergence of the Exchange Value and the Transaction Value.

* * *

Active uranium supply remained essentially stable, increasing by only 175 thousand pounds, to **5.4** million pounds equivalent U_3O_8 (**Table 2**). **Active uranium demand** increased more noticeably, growing from 1.6 million to **2.5** million pounds equivalent U_3O_8. The increase in demand resulted in a decline of the **supply-demand ratio** to **2.2**.

* * *

The **Loan Rate** remained at **3.5** percent per annum. No loans are reported for February. Loan supply decreased slightly from last month's record level, but still remains above nine million pounds (**Table 2**).

* * *

The **Conversion Value** remained at **$1.45** per pound U as UF_6, unchanged for an entire year. Activity increased in the conversion market in the past month as an influx of demand has drawn out suppliers. Three conversion transactions are reported. The sales, all from US sellers, involved a total exceeding 1.5 million pounds U. One of the sales was for near-term delivery; the others called for deliveries during the period 1991-1992.

* * *

ENRICHMENT SERVICES AND ENRICHED URANIUM PRODUCT

Table 3
ENRICHMENT PRICES
(February 28, 1991)

Prices	This Month Report 271	Last Month Report 270	12 Months Ago Report 259
NUEXCO SWU Value ($US per SWU)	50	51	50
US DOE SWU prices: ($US per SWU)			
USEC	117.85[1]	117.85[1]	117.85[1]
AFC	153.00[3]	153.00[3]	153.00[3]
Requirements	157.00[3]	157.00[3]	157.00[3]
Incentive Price (IP2)[4]	100.60[4]	100.60[4]	90.00[5]
Calculated worth of enriched UF_6[6]: ($US per KgU as UF_6)			
2.0 w/o U_{235}	201	198	193
2.5 w/o U_{235}	277	274	266
3.0 w/o U_{235}	355	352	342
3.5 w/o U_{235}	435	431	420
4.0 w/o U_{235}	516	512	498
4.5 w/o U_{235}	598	593	578

[1] Effective 10/1/89 to 9/30/91.
[2] Effective 10/1/87 to 9/30/89.
[3] Effective since 10/1/84.
[4] IP2: Effective 10/1/90 to 9/30/91, for up to 30% of annual requirements.
[5] Used Incentive Price IP1 – effective 10/1/86 to 9/30/90, for up to 30% of annual requirements.
[6] Calculated using the NUEXCO Exchange Value, Conversion Value, SWU Value and 0.30 w/o tails assay.

The **SWU Value** fell one dollar, to **$50** per SWU. Although demand remained relatively high, with some new buyers entering the market during the month and several utilities evaluating offers, aggressive competition among sellers led to the price decline. At least eight buyers were evaluating offers at month end—nearly all reported that they had received several competitive offers. Four more utilities are expected to begin evaluating offers in March.

Three EUP transactions are reported for February. The sales involved nearly 700 thousand pounds equivalent U_3O_8 and almost 150 thousand SWU. Two utilities and a fabricator made the purchases from intermediary sellers.

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MARKET REVIEW

RECENT TRANSACTIONS

Uranium Sales [1]

NUEXCO Transaction Number	Delivery Period	Approximate Quantity (thousand pounds equivalent U_3O_8)	Price Within Percentage Range [2] of Current Exchange or UF_6 Value	Buyer	Seller	Remarks
5044	1991	101-300	98-102	Intermediary	Intermediary	
5045	1991	Less Than 50	90-97	Producer	Intermediary	
5046	1991	Less Than 50	90-97	Producer	R	
5047	1991	50-100	90-97	Producer	Intermediary	
5048	1991	101-300	R	Producer	R	
5049	1991	101-300	98-102	Intermediary	Intermediary	
5051A	1991	101-300	See Remarks	Utility	Intermediary	Contained in EUP
5054	1991	101-300	98-102	Utility	Producer	
5055A	1991	301-600	See Remarks	Utility	Intermediary	Contained in EUP
5056A	1991	Less Than 50	See Remarks	Fabricator	Intermediary	Contained in EUP
5057	1991	101-300	98-102	Utility	Intermediary	

R means that NUEXCO either does not know, or that NUEXCO has restricted that information to protect client or source confidentiality.

[1] Transactions listed are not limited to those in which NUEXCO was involved, but also include others of which NUEXCO is aware. NUEXCO may delay reporting some transactions in order to protect proprietary information.

[2] The ranges *Below 90, 90-97, 98-102, 103-110, Above 110*, represent percentages (rounded to whole numbers) of the appropriate current Exchange Value or UF_6 Value. The endpoints of each range are included within that range.

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RECENT TRANSACTIONS

Natural Uranium Loans [1]

NUEXCO Transaction Number	Delivery Period	Approximate Quantity (thousand pounds equivalent U_3O_8)	Price Within Percentage Range [2] of Current Loan Rate	Borrower	Lender	Remarks
No Loans Are Reported						

Conversion Sales [1]

NUEXCO Transaction Number	Delivery Period	Approximate Quantity (thousand pounds of U equivalent)	Price Within Percentage Range [2] of Current Conversion Value	Buyer	Seller	Remarks
5039	1991-1992	1,001-3,000	R	R	Converter	
5050	1991-1992	101-300	98-102	Intermediary	Utility	
5052	1991	50-100	Above 110	Utility	Intermediary	

Enrichment Sales [1]

NUEXCO Transaction Number	Delivery Period	Approximate Quantity [3] (thousand SWU)	Price Within Percentage Range [2] of Current SWU Value [4]	Buyer	Seller	Remarks
5051B	1991	50-100	See Remarks	Utility	Intermediary	Contained in EUP
5055B	1991	50-100	See Remarks	Utility	Intermediary	Contained in EUP
5056B	1991	Less Than 50	See Remarks	Fabricator	Intermediary	Contained in EUP

R means that NUEXCO either does not know, or that NUEXCO has restricted that information to protect client or source confidentiality.

1 Transactions listed are not limited to those in which NUEXCO was involved, but also include others of which NUEXCO is aware. NUEXCO may delay reporting some transactions in order to protect proprietary information.

2 The ranges *Below 90, 90-97, 98-102, 103-110, Above 110*, represent percentages (rounded to whole numbers) of the appropriate current Market Value. The endpoints of each range are included within that range.

3 If tails assay is unknown or unspecified, NUEXCO's calculation of SWU quantity assumes 0.30 w/o tails assay.

4 Prices are usually normalized to 0.30 w/o tails assay. When prices and SWU values are expressed as discounts from a reference price (e.g., X dollars less than DOE's USEC base price at time of delivery), the percentage price range is based on the discounted prices, not on the reference price.

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MARKET REVIEW

SUPPLY AND DEMAND

Uranium Supply

NUEXCO Project Number	Quantity (Thousand Pounds equivalent U_3O_8) Spot or Near-term[1]	Intermediate or Long-term[2]	Delivery Period	Remarks
AVAILABLE FOR SALE:				
ACTIVE				
90-1078A	700	1,045 per year	1991-1993	UF_6e
90-1227	500	—	1991	
90-1231	500	500 per year	1991-1995	
90-1249	500	—	1991	
90-1501*	3,000	1,000 per year	1991-1995	U_3O_8/UF_6
91-1056*	75	—	1991	
91-1060*	100	—	1991	
Total	**5,375**			
INACTIVE	**4,100**			
AVAILABLE FOR LOAN:				
ACTIVE				
88-1182	4,400	—	U_3O_8/UF_6	
90-1016	1,000	—	U_3O_8	
90-1230	1,000	—	U_3O_8	
90-1260	1,000	—	UF_6	
90-1275	100	—	U_3O_8	
91-1009*	340	—	U_3O_8	
91-1018	500	—	U_3O_8	
91-1034*	1,000	—	U_3O_8	
Total	**9,340**			
INACTIVE	**1,000**			

*New or revised since last month.

[1] For delivery within one year, measured from the date of this Report. This category excludes material deliverable within one year under other than spot or near-term contracts.

[2] For delivery beyond one year, measured from the date of this Report.

Active Projects reclassified as Inactive since last month: *none*
Active Projects removed since last month: 90-1108, 90-1180, 91-1007

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SUPPLY AND DEMAND

Uranium Demand

NUEXCO Project Number	Quantity (Thousand Pounds equivalent U_3O_8) Spot or Near-term [1]	Intermediate or Long-term [2]	Delivery Period	Remarks
INQUIRIES TO PURCHASE:				
ACTIVE				
90-1100A	45	—	1991	UF_6e
90-1289*	210	—	1991	
91-1003A	750	—	1991	UF_6e
91-1029A	10	—	1991	UF_6e
91-1037*	25	—	1991	
91-1040*	525	—	1991-1992	UF_6
91-1045*	120	—	1991	
91-1048*	400	—	1991	U_3O_8/UF_6
91-1061*	400	—	1991	
90-1291	—	100 per year	1991-1995	
91-1014A	—	6,800	1992-2001	UF_6e
91-1017	—	300 per year	1995-2000	
91-1038*	—	130 per year	1992-1996	
91-1054*	—	1,200	1992-1997	
Total	**2,485**			
INACTIVE	**2,565**			
INQUIRIES TO BORROW:	*No inquiries to borrow are reported*			

* New or revised since last month.

[1] For delivery within one year, measured from the date of this Report. This category excludes material deliverable within one year under other than spot or near-term contracts.

[2] For delivery beyond one year, measured from the date of this Report.

Active Projects reclassified as Inactive since last month: *none*
Active Projects removed since last month: 90-1170, 90-1239A, 90-1240, 90-1256, 90-1267, 90-1293, 91-1013

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MARKET REVIEW

SUPPLY AND DEMAND

Conversion Supply And Demand

NUEXCO Project Number	Quantity (Thousand Pounds U as UF_6) Within 3 Years [1]	Beyond 3 Years [1]	Delivery Period	Remarks
AVAILABLE FOR SALE:				
ACTIVE				
91-1033	220	—	1991	
91-1500*	300	—	1991	
91-1501*	400	—	1991	
Total	**920**			
INACTIVE	*None reported*			
INQUIRIES TO PURCHASE:				
ACTIVE				
91-1003C	630	—	1991	
Total	**630**			
INACTIVE	*None reported*			

* New or revised since last month.

[1] Measured from the date of this Report.

Active Projects reclassified as Inactive since last month: *none*
Active Projects removed since last month: *none*

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SUPPLY AND DEMAND

SWU Supply And Demand

NUEXCO Project Number	Quantity (Thousand SWUs) Spot or Near-term [1]	Intermediate or Long-term [2]	Delivery Period	Remarks
AVAILABLE FOR SALE:				
ACTIVE				
88-1006	150	—	1991	
90-1078B	200	435 per year	1991-1993	UF_6e
91-1008*	75	—	1991	
91-1032	150	—	1991	
90-1500*	—	1,000	1991 on	
Total	**575**			
INACTIVE	**500**			
INQUIRIES TO PURCHASE:				
ACTIVE				
90-1100B	15	--	1991	UF_6e
90-1224	40	100 per year	1991-1995	
91-1003B	170	—	1991	UF_6e
91-1023	60	120	1991-1995	
91-1029B	5	—	1991	UF_6e
91-1057	50	—	1991	
90-1094	—	500	1992-2000	
90-1181*	—	1,500	1996-2001	
90-1196	—	60 per year	1995 on	
90-1301	—	1,000 per year	1995-2000	
91-1014B	—	1,770	1992-2001	UF_6e
91-1027	—	55 per year	1996-2000	
91-1028	—	125	1995-1996	
Total	**340**			
INACTIVE	**340**			

* New or revised since last month.

[1] For delivery within one year, measured from the date of this Report. This category excludes SWU deliverable within one year under other than spot or near-term contracts.

[2] For delivery beyond one year, measured from the date of this Report.

Active Projects reclassified as Inactive since last month: 91-1010B
Active Projects removed since last month: 90-1076, 90-1144, 90-1239B, 91-1001, 91-1025

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MARKET REVIEW

MARKET VALUES EXPRESSED IN SELECTED CURRENCIES

Exchange Value[1]

Country (currency)	per lb equivalent U_3O_8 as Concentrates			per kg U as Concentrates		
	This Month (Feb. 28, 1991)	Last Month (Jan. 31, 1991)	12 Months Ago (Feb. 28, 1990)	This Month (Feb. 28, 1991)	Last Month (Jan. 31, 1991)	12 Months Ago (Feb. 28, 1990)
Australia (dollar)	12.10	11.59	11.47	31.46	30.14	29.82
Belgium (franc)	297.62	280.09	306.01	773.74	728.16	795.57
Canada (dollar)	10.94	10.57	10.39	28.44	27.47	27.01
EC (ecu)	7.06	6.63	7.19	18.36	17.23	18.68
Finland (markka)	34.84	32.87	34.51	90.58	85.44	89.73
France (franc)	49.18	46.04	49.69	127.86	119.68	129.19
Germany (mark)	14.46	13.57	14.68	37.60	35.27	38.15
Italy (lira)	10,802	10,171	10,860	28,082	26,442	28,234
Japan (yen)	1,254	1,195	1,293	3,261	3,106	3,362
Netherlands (guilder)	16.30	15.25	16.54	42.37	39.65	43.01
So. Africa (comm. rand)	24.39	23.18	22.21	63.41	60.26	57.73
So. Korea (won)	6,812	6,525	6,082	17,708	16,963	15,813
Spain (peseta)	900.13	847.69	944.42	2,340	2,204	2,455
Sweden (krona)	53.64	50.61	53.08	139.46	131.58	138.00
Switzerland (franc)	12.50	11.52	12.91	32.50	29.96	33.55
Taiwan (dollar)	253.65	242.29	229.92	659.44	629.91	597.75
UK (pound)	4.95	4.64	5.15	12.88	12.07	13.38
US (dollar)	9.50	9.10	8.70	24.70	23.66	22.62

Transaction Value[1]

Country (currency)	per lb equivalent U_3O_8 as Concentrates			per kg U as Concentrates		
	This Month (Feb. 28, 1991)	Last Month (Jan. 31, 1991)	12 Months Ago (Feb. 28, 1990)	This Month (Feb. 28, 1991)	Last Month (Jan. 31, 1991)	12 Months Ago (Feb. 28, 1990)
Australia (dollar)	12.04	11.97	11.93	31.30	31.13	31.02
Belgium (franc)	296.05	289.32	318.33	769.67	752.17	827.58
Canada (dollar)	10.88	10.91	10.81	28.29	28.37	28.09
EC (ecu)	7.02	6.85	7.48	18.26	17.80	19.43
Finland (markka)	34.66	33.95	35.90	90.10	88.26	93.34
France (franc)	48.92	47.55	51.69	127.19	123.63	134.39
Germany (mark)	14.39	14.02	15.27	37.40	36.44	39.69
Italy (lira)	10,745	10,506	11,297	27,934	27,314	29,370
Japan (yen)	1,248	1,234	1,345	3,244	3,209	3,498
Netherlands (guilder)	16.21	15.76	17.21	42.15	40.96	44.74
So. Africa (comm. rand)	24.26	23.94	23.10	63.08	62.25	60.05
So. Korea (won)	6,776	6,740	6,357	17,615	17,522	16,528
Spain (peseta)	895.40	875.64	982.41	2,328	2,276	2,554
Sweden (krona)	53.36	52.28	55.22	138.72	135.92	143.55
Switzerland (franc)	12.44	11.90	13.43	32.33	30.95	34.90
Taiwan (dollar)	252.32	250.28	240.32	655.97	650.67	624.77
UK (pound)	4.93	4.79	5.36	12.81	12.47	13.92
US (dollar)	9.45	9.40	9.05	24.57	24.44	23.53

[1]Calculated using currency exchange rates published in *The Wall Street Journal* on the last working day of the month.

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MARKET VALUES EXPRESSED IN SELECTED CURRENCIES

Conversion Value[1]

Country (currency)	per lb U as UF_6			per kg U as UF_6		
	This Month (Feb. 28, 1991)	Last Month (Jan. 31, 1991)	12 Months Ago (Feb. 28, 1990)	This Month (Feb. 28, 1991)	Last Month (Jan. 31, 1991)	12 Months Ago (Feb. 28, 1990)
Australia (dollar)		1.85	1.98	4.07	4.07	4.36
Belgium (franc)		44.63	52.76	100.15	98.39	116.32
Canada (dollar)		1.68	1.79	3.68	3.71	3.95
EC (ecu)	1.0	1.06	1.24	2.38	2.33	2.73
Finland (markka)	5.32	5.24	5.95	11.72	11.55	13.12
France (franc)	7.51	7.34	8.57	16.55	16.17	18.89
Germany (mark)	2.21	2.16	2.53	4.87	4.77	5.58
Italy (lira)	1,649	1,621	1,872	3,635	3,573	4,128
Japan (yen)	191.47	190.39	222.98	422.12	419.74	491.59
Netherlands (guilder)	2.49	2.43	2.85	5.48	5.36	6.29
So. Africa (comm. rand)	3.72	3.69	3.83	8.21	8.14	8.44
So. Korea (won)	1,040	1,040	1,031	2,292	2,292	2,273
Spain (peseta)	137.39	135.07	162.83	302.89	297.78	358.98
Sweden (krona)	8.19	8.06	9.15	18.05	17.78	20.18
Switzerland (franc)	1.91	1.84	2.23	4.21	4.05	4.91
Taiwan (dollar)	38.72	38.61	38.97	85.35	85.11	85.91
UK (pound)	0.76	0.74	0.89	1.67	1.63	1.96
US (dollar)	1.45	1.45	1.50	3.20	3.20	3.31

SWU Value And UF_6 Value[1]

Country (currency)	SWU Value at 0.30 w/o Tails Assay			UF_6 Value per kg U as UF_6		
	This Month (Feb. 28, 1991)	Last Month (Jan. 31, 1991)	12 Months Ago (Feb. 28, 1990)	This Month (Feb. 28, 1991)	Last Month (Jan. 31,1991)	12 Months Ago (Feb. 28, 1990)
Australia (dollar)	63.69	64.97	65.92	35.35	35.03	33.28
Belgium (franc)	1,566	1,570	1,759	869.36	846.41	888.14
Canada (dollar)	57.58	59.21	59.70	31.96	31.93	30.14
EC (ecu)	37.16	37.15	41.30	20.62	20.03	20.85
Finland (markka)	183.37	184.19	198.35	101.77	99.32	100.16
France (franc)	258.85	285.01	285.60	143.66	139.12	144.22
Germany (mark)	76.12	76.04	84.35	42.24	41.00	42.59
Italy (lira)	56,850	57,002	62,414	31,552	30,737	31,519
Japan (yen)	6,602	6,696	7,433	3,664	3,611	3,754
Netherlands (guilder)	85.78	85.48	95.08	47.61	46.09	48.01
So. Africa (comm. rand)	128.37	129.90	127.62	71.25	70.05	64.44
So. Korea (won)	35,850	36,567	37,113	19,897	19,718	17,801
Spain (peseta)	4,738	4,751	5,428	2,629	2,562	2,741
Sweden (krona)	282.33	283.95	305.06	156.69	152.95	154.05
Switzerland (franc)	65.80	64.59	74.17	36.52	32.83	37.46
Taiwan (dollar)	1,335	1,358	1,403	740.93	732.20	672.88
UK (pound)	26.07	26.01	29.59	14.47	14.03	14.94
US (dollar)	50.00	51.00	50.00	27.75	27.50	25.25

[1]Calculated using currency exchange rates published in *The Wall Street Journal* on the last working day of the month.

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RECENT DEVELOPMENTS

JAPAN

Mihama 2 Incident May Slow Japan's Nuclear Growth

The Mihama 2 nuclear unit, a 470-MWe (net) PWR owned and operated by Kansai Electric Power Corporation of Japan, suffered an automatic shutdown on February 9. The incident was Japan's first necessary activation of its emergency core cooling system (ECCS), and was the country's most severe incident in its nearly 30 years of nuclear power plant operation. The event rated as a level 3 on the Japanese scale, but would only be rated at a level 1 or 2 on the International Atomic Energy Association's nuclear accident severity scale (a rating of 1 is the least severe; a 7 is the highest-severity rating). A rupture of a tube in the steam generator caused the incident.

The incident has garnered significant press coverage which may hinder the government's plans to build 40 additional nuclear plants over the next 20 years (NUEXCO Monthly Report #263, July 1990, p.19). Government and utility officials fear that the extensive press coverage, including many inaccuracies, may provide anti-nuclear groups with enough attention to enlist sufficient public support to slow or even stop plans for many of the proposed additional plants.

Numerous early reports of the incident claimed operator error, equipment malfunctions, and serious releases of radioactivity. Later, detailed reports of the incident show that operators followed standard procedures and reacted promptly.

The staff noticed slight level changes in the readings of secondary circuit monitoring equipment for the steam generator at 12:40 pm, and immediately proceeded with water samplings to test for radioactivity leaks. Kansai's established procedure calls for the tests to be performed twice for verification. While the second test was being performed, less than one hour after the initial changes in monitor readings, an alarm sounded that radioactivity had suddenly jumped past the triggering level of 2.5 times the normal operation setpoint. Five minutes later, while the staff was beginning a manual shutdown of the reactor, a second alarm sounded. A few minutes later, a sudden drop in primary coolant pressure triggered the automatic shutdown of the reactor and the operation of the ECCS.

The only emergency equipment failure was a pressure relief valve that failed to respond when operators signalled it to open, following their isolation of the steam generator. Within ten minutes of the initial alarm, all releases of radioactivity to the atmosphere had been stopped. Reports on the amount of radioactivity released ranged from the equivalent of a few days of operation to one year's worth of operation, and none of these levels are considered significant or harmful to the environment. Local citizen groups monitoring the area immediately after the incident detected no significant increases in radioactivity. Within 20 minutes of the first alarm, Kansai officials began notifying national and government agencies of the incident.

The USA and France do not even rate steam generator tube ruptures at as severe an incident level as the Japanese. Japan also has some of the strictest inspection programs for these tubes in the world—100 percent of the tubes are inspected every 13 months. Nevertheless, the Japanese government and industry have already initiated procedural changes for inspections, immediate precautionary inspection of similar plants, and two extensive studies of the incident.

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RECENT DEVELOPMENTS

USA

US National Energy Strategy

The Bush Administration released its National Energy Strategy (NES) at a special White House ceremony on February 20th. The product of over 18 months of hearings and analysis, the NES is designed to encourage diversification of US energy sources and more efficiency and flexibility in energy consumption. The plan relies on market forces, rather than government intervention to achieve its goals, thus, many critics are skeptical about the NES's political viability. Environmentalists are critical of provisions in the plan to open the Alaska National Wildlife Refuge (ANWR) to oil exploration, and the de-emphasis on conservation and energy efficiency programs. Amid this controversy, the nuclear sections of the strategy have largely been ignored by the critics. A legislative package implementing the NES has been sent to Congress. Congress will consider this bill, along with other omnibus energy bills already before Congress, as the framework for a US energy policy. Highlights of the plan related to utilities include proposals to:

- amend the Public Utility Holding Company Act (PUHCA) to allow power suppliers to build, own and operate power facilities in more than one area;
- support state and utility efforts to invest in energy efficiency as an alternative to power plant additions;
- reform the Public Utility Regulatory Policies Act (PURPA) to modify size and fuel use restrictions for small power producers;
- expand access to electricity transmission for utility and non-utility wholesale buyers and sellers.

As part of the legislation sent to Congress, the Administration proposed changing the Federal Energy Regulatory Commission's (FERC) status from an independent agency to a program within DOE. DOE projects these and other recommendations will reduce electricity demand growth by over 10% in 2010 and save consumers $27 billion. Concerning nuclear power, the NES proposes:

- streamlining the nuclear plant licensing process, as well as the process for siting and licensing spent fuel facilities;
- developing standardized designs for advanced LWRs;
- concentrating R&D on passively-safe reactors.

If the recommendations are approved, DOE projects that nuclear power production could increase 10% over previous projections for 2010. The most controversial section of the nuclear portion of the NES is a proposed change to the Nuclear Waste Policy Act. The changes will speed up the siting process for the spent fuel repository at Yucca Mountain, Nevada by removing a requirement for the state and local permits currently needed to proceed with site characterization. The state of Nevada and its Congressional delegation have already written a letter claiming such a change "subverts the democratic process and threatens the foundation of state-federal relations."

In addition to the administration's energy proposal, Congress has a number of ideas for creating an energy policy. Chairman of the Energy & Natural Resources Committee, Sen. J. Bennett Johnston (D-LA), and ranking minority member Malcolm Wallop (R-WY), have introduced the National Energy Security Act (S 34). This bill incorporates many of the same recommendations as the NES, while calling for more energy efficiency with plans to reestablish CAFE (Corporate Average Fuel Economy) standards. An omnibus energy bill will most likely be enacted by this Congress.

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WASHINGTON FOCUS

by Linda L. Gunter

The Bush administration released its budget at the beginning of February, and the National Energy Strategy was issued near the end of the month. Both documents illustrate an effort by the administration to promote science and technology without formally creating an industrial policy. Increased funding will translate into more federal government resources for basic science and advanced research, as well as more programs for technology transfer from government laboratories to the private sector. If Congress approves the budget, overall civilian research and development spending will increase 13 percent, and basic science research by 8 percent. While the majority of R&D funding is still allocated to defense projects, support for civilian programs such as fusion research will increase by 23 percent, to $337 million, and agencies supporting basic science, such as the National Science Foundation and the National Institutes of Health, will increase their budgets by 18 percent and 7 percent, respectively. Considering the government's overall budget constraints (fund increases in one program must be offset by cuts in other programs) this is a significant commitment to science and education.

FY 92 Budget

◇ DOE's budget increased to $18.6 billion, primarily reflecting the growing costs of cleaning up the nation's defense weapons sites. DOE's FY92 budget request for nuclear programs is $2.6 billion, a $300 million increase from FY91. The light water reactor program will receive $62.5 million; $49.5 million has been requested for advanced reactor R&D. Within this budget category, $20 million has been ear–marked for a "first-of-a-kind" cost-shared engineering program designed to achieve standardization of a nuclear plant by 1995.

The NRC's budget expanded, due to a new law requiring 100 percent of the budget be collected in user fees. Based on a FY92 budget request of $512.5 million, utility user fees could triple to an average of $3 million per reactor. Reactor safety and safeguards regulations programs will grow by over $10 million, from $188 million in FY91 to $199 million in FY92. Nuclear safety research also received approximately a $10 million increase. The nuclear material/low level waste safety and safeguards office receives a $1.3 million increase. According to budget documents, the NRC plans 200 additional inspections of material licensees, and continued review of the adequacy of the decontamination of nuclear materials and fuel cycle facilities. If this budget is approved, the NRC will increase its staff by 100.

Activities mandated by the new Clean Air Act Amendments will increase the Environmental Protection Agency's (EPA) budget by 2.7 percent; seventy percent of that increase will be devoted to enforcing this new law. For example, the FY92 request for air quality programs increases by $117 million, to $512 million. The Office of Radiation Programs budget request also increases slightly, to $39.6 million with an emphasis on reducing radon exposure, and $6.3 million for implementation of radiation standards.

NESHAP Impact on Nuclear Industry Reduced

◇ On February 15, the EPA issued a notice of its intent to stay, and eventually rescind, a section of its National Emission Standards for Hazardous Air Pollutants for Radionuclide Emissions (NESHAPS) which is applied to NRC licensed facilities. Under a provision of the Clean Air Act Amendments which Sen. Alan Simpson (R-WY) sponsored, the EPA can determine that NRC regulation was sufficient to protect the public health and safety. This notice removes nuclear power plants from most EPA regulation, but unfortunately does

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not resolve questions the uranium mining industry has raised on other sections of the rule, specifically in Subparts T & W. Operators of uranium mill tailing sites must be in compliance with Subpart T by December 15, 1991. Although the EPA recognizes it is impossible for operators to meet this deadline for compliance, the EPA has not stayed that portion of the rule.

IP III Proposal

◇ Although the Office of Management & Budget (OMB) has halted DOE's attempt to offer customers an Incentive Price III proposal, DOE officials did succeed in winning a concession. DOE cannot formally announce IP-III, but it hopes to have legal authority to negotiate IP-III like prices (and other areas where it can be flexible) with individual utilities on a case-by-case basis. DOE's position is that it already has the authority to make these offers based on the revised criteria published in 1986, which allows DOE to deal with customers that are similarly situated on an individual basis. Thus, it may be able to accomplish its goal despite OMB resistance.

DOE Awards Repository, M & O Contract to TRW

◇ On February 13, DOE awarded the $1 billion systems engineering, development, and management contract for the civilian spent fuel repository at Yucca Mountain, Nevada to TRW Environmental Safety Systems (TESS). The initial award is $15.8 million for the first six months, with an option to renew for an additional five years. DOE originally awarded the contract to Bechtel System Management Inc., but the US Claims Court in Washington, DC ruled in 1989 that DOE violated conflict-of-interest laws when it made the award and permanently barred Bechtel from receiving the contract. TESS will coordinate a team of subcontractors which include Duke Engineering, Babcock & Wilcox, and Fluor Daniel among others. They are responsible for all systems engineering at Yucca Mountain as well as licensing and quality assurance for a Monitored Retrievable Storage (MRS) facility. DOE's budget request for the high-level nuclear waste program is $305.1 million, approximately a $62 million increase over FY91. Included in the figure is $32.2 million for MRS siting and preliminary design activities.

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INDUSTRY BRIEFS

Energy Fuels Announces Joint Venture

On January 16, 1991, John Adams, Chairman of Energy Fuels, and Oren Benton, owner of NUEXCO, announced a joint venture involving all of the uranium operations of Energy Fuels. Energy Fuels, which was founded in 1972, has been the largest US uranium producer since 1986. The company holds over 20 million pounds of uranium reserves located in Mojave county, Arizona.

Mr. Benton and the Adams family will have equal interests in Energy Fuels' uranium operations. Mr. Adams and Mr. Benton will serve as co-chairmen of Energy Fuels, with Mr. Adams continuing to direct its day-to-day operations. Mr. Benton was associated with Energy Fuels as Vice-Chairman prior to his purchase of NUEXCO.

The parties have stated that the companies will remain separate participants in the nuclear fuel industry, cooperating where appropriate to strengthen each as a trading organization and as a producer.

Bids Out For Two-Unit Nuclear Station In Czechoslovakia

A consortium of Czechoslovakian enterprises has requested bids for the design and construction of two 1,000 to 1,400 MWe nuclear power plants. The enterprises forming the consortium are Energoprojeckt, Ceske Energeticke Zavody, Slovenske Energeticke Podniky, Ceskoslovensky Uranovy Prumsyl Koncern, and a representative for the Czechoslovak Atomic Energy Commission. The initial requests were sent to Asea Brown Boveri, General Electric, Mitsubishi, Nuclear Power International, Westinghouse, and the Czech firm of Skoda. The second unit can be bid as an option. The consortium's bid request asks for either PWR or BWR designs, and is receptive to alternative designs, including passively-safe units. The Czechoslovakian government expects to decide on the site for the two units later this year.

China Releases New Information On Nuclear Power Plans

Jiang Xinxiong, President of China National Nuclear Corporation, provided further details of China's nuclear power plans at a conference in Beijing earlier this year. China plans to have six commercial nuclear power plants in operation by 1994, with an output of at least 2,100 MWe (gross).

The plan has three phases. The first phase includes the start-up this year of Qinshan, China's first commercial nuclear power plant (300 MWe gross; its first domestically-produced nuclear plant), and the next year's start-up of the 900 MWe (gross) Daya Bay reactor. The second phase includes a second, matching unit at Daya Bay by 1993, and a matching 300-MWe unit plus two 600-MWe units at Qinshan by 1993-1994. The third phase includes an unspecified number of new plants by the year 2000 to raise nuclear-power-generated electricity to over 6,000 MWe.

Mr. Jiang also stated that China plans to increase total electrical generation from all sources to 810 billion kWH by 1996, up from the current level of 615 billion kWH.

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Queensland Government Opposes Uranium Mining

A recently-released report from the government of the Australian state of Queensland indicated that uranium mining is not part of Queensland's long-term energy policy. It is not clear in what manner the government would prohibit uranium mining. None of Australia's major deposits are located in the state of Queensland, so this report is unlikely to affect the country's current uranium operations. However, the timing of the report's release may be prompted by the upcoming July 1991 conference of the Australian Labor Party. That conference plans to examine, and possibly modify or eliminate, the existing "three mines policy."

India Marketing Nuclear Power Technology

The government of India has approved its Atomic Energy Commission's (AEC) plan to market technology and products for nuclear power plants. Government approval came when the marketing plan was accompanied by a plan to report the details of all transactions to the IAEA, even though India is not a signatory to the NPT. The AEC's marketing effort is focusing on third-world countries since they do not require, and are least able to afford, sophisticated technology from the major industrialized nations.

Olympic Dam Expansion To Increase Uranium Production

Western Mining Corporation and British Petroleum, owners of Australia's Olympic Dam project, announced that an 18-month, A$66-million expansion program is underway. The completed program will allow uranium production to increase by nearly 16 percent, to 1,400 metric tons U_3O_8 per year (approximately 3.1 million pounds) by mid-1992.

CLARIFICATION

The February 1991 NUEXCO Monthly Report #270 contains an article that requires clarification. The article, titled *North American Exploration and Development in 1990*, contains a paragraph on page 30 that unintentionally implies that Total Minerals has a financial interest in Fuel International Trading Corporation (FITCO). TOTAL, a subsidiary of Total Compagnie Française des Petroles, is the operator of the project. FITCO is a wholly-owned subsidiary of Electicité de France (EdF). In a complex transaction (explained in detail in the August 1990 NUEXCO Monthly Report #264, p.14), FITCO acquired the uranium-related assets of Malapai Resources.

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NUEXCO

ANALYSIS AND COMMENTARY

STATUS OF ANTI-NUCLEAR POLICIES WORLDWIDE

Nuclear power may be ready for a resurgence as a viable and clean alternative energy source. However, many obstacles must be overcome for this renewal to occur. Legislative moratoriums and other formal restrictions have raised some of the biggest obstacles to the recovery of the nuclear power industry. This article presents a country-by-country summary of such policies.

EUROPE

Some of the world's strongest national nuclear programs are those of France and Belgium. Yet, Europe has some of the strongest anti-nuclear sentiment and strictest anti-nuclear legislation.

Austria

Austria's socialist government continues to maintain its anti-nuclear posture. Austria's only nuclear power reactor, Tullnerfeld, was 98% complete when it was cancelled in 1978. The reactor was ordered in 1971, and its design and construction proceeded without any undue technical or construction problems, but the plant met with opposition from its inception. In November 1978, the anti-nuclear faction won a national referendum to determine the fate of the plant. By a narrow margin, the project was halted and a moratorium on nuclear power construction enacted.

In the early 1980s, Tullnerfeld was kept on standby as nuclear proponents worked to garner support for the project. By 1985, it appeared that support had grown sufficiently to allow completion and operation of the plant. But, reaction to the early 1986 Chernobyl accident effectively eliminated the nuclear option in Austria. Tullnerfeld is now planned for conversion to a gas-fired power station.

Austria's moratorium on nuclear power construction remains in force. The country has even begun pressuring neighboring countries to close all of their nuclear facilities. In particular, Austria has applied considerable pressure on the government of Czechoslovakia to close its two-unit Bohunice station situated near the Austrian border. Austria has even offered to provide Czechoslovakia with free electricity for 12 months to offset the generating capacity that would be lost if the station were closed.

Belgium

Belgium's seven nuclear power plants generated over 60 percent of the country's electricity in 1990. Despite the success of its nuclear program, Belgium's government rejected a proposal in December 1988 by Belgian utilities to construct an eighth reactor. Rather, the government supported plans for an additional gas-fired plant to meet its growing electricity demand. The government stated that the decision did not eliminate nuclear as an option, and that the decision on the eighth plant will be reviewed in 1995.

Czechoslovakia

Czechoslovakia is one of Eastern Europe's most industrialized nations, and its newly-elected democratic government remains committed to nuclear power. However, pressure from Western countries and from local environmental groups is forcing the government to reexamine its nuclear plans. All of Czechoslovakia's reactors are Soviet-designed, and thus are undergoing close scrutiny by Western agencies. The four-unit Bohunice station (4 x 408 MWe net), near the Austrian border, is under the most pressure. The Czech government is currently analyzing a proposal from Austria that offers free electricity for one year and a US$340 million contribution toward decommissioning costs, in return for Czechoslovakia closing the Bohunice station. Czechoslovakia has neither accepted nor rejected the proposal, although government officials are unlikely to accept the offer. The government wishes to complete its units under construction at other sites, then decide the fate of the nuclear option on a national basis.

The Temelin station is also undergoing scrutiny. Units 1 and 2 are already on line, while units 3 and 4 are still under construction. The Czech government is examining plans to have units 3 and 4 completed using Western technology and to have the entire station backfitted with Western instrumentation and controls (I&C). While local government has no authority in determining the fate of the Temelin reactors, the Lower Bohemian regional council in the Prague area voted in late 1990 to halt construction of units 3 and 4.

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Denmark

In 1985, the Danish Parliament voted that nuclear power should no longer be part of the country's energy plans, and that sites reserved for nuclear power plants should be made available for other uses. The decision referred to nuclear power with presently-known technology, thus leaving open the possibility to reconsider the nuclear option in the future. The Danish government has also been exerting pressure on Sweden to close its Barseback station, which is located only 20 km away across the Øresund. Thus far, Sweden has not taken any action in response.

Finland

In 1987, the Finnish government declared a moratorium on the ordering of the country's fifth nuclear power plant. The present government of Finland is a coalition of Social Democrats, Conservatives, and the Swedish People's Party. This moratorium will expire in March 1991 when new general elections are held. Consequently, the nuclear issue has become a key topic of debate as the elections approach.

Support for nuclear power has been growing in Finland; recent studies have recommended maintaining the option, public opinion is more positive, and even the Prime Minister has publicly encouraged nuclear power. Finland's four operating reactors have some of the highest capacity factors in the world. Two of the reactors are Finnish-modified Soviet-designs. Perusvoim Oy (PVO), the consortium trying to build the fifth nuclear plant, has officially notified the Ministry of Trade and Industry that it intends to apply for permission to build the plant following the elections. The nuclear issue is still divisive, and the outcome of the March elections will largely determine the fate of Finland's nuclear option in the near term.

Germany

Germany's nuclear program continues to struggle with local opposition throughout the country. The conservative Christian Democratic Union (CDU) leads the national government, and is a strong supporter of nuclear power. The platform of the Social Democratic Party (SDP), the principal opposition party, opposes the use of nuclear power. The anti-nuclear SDP controls five of the seven state governments in former West Germany that have nuclear power plants. This presents a special challenge to the Federal government because Germany's post-World War II constitution tends to favor states' rights over those of the central government. The pro-nuclear CDU leads the governments in Bavaria and Baden-Würtemberg; an SDP-led government runs the states of Hesse, North-Rhine Westphalia, Schleswig-Holstein, Hamburg, and Lower Saxony.

Although federal courts have ruled specifically that federal mandates concerning nuclear power override any state laws, the states continue to refuse to follow federal rulings regarding nuclear power in certain instances. For example, the state of North Rhine-Westphalia defied a federal order to license the Kalkar fast breeder reactor, by commissioning a study of emergency planning associated with the reactor. The court had ruled the state did not have the right to commission a study comparing the Kalkar reactor to a Soviet RBMK (Chernobyl-type) reactor and thus delay the licensing process. But, by commissioning the emergency planning study, the state does not have to proceed with licensing and the federal government cannot overrule, because emergency preparedness planning is the responsibility of the individual states.

The states of Schleswig-Holstein and Lower Saxony have reiterated their intention to phase out nuclear power in their states. The efforts are initially focused on closing down the nuclear power plants, with the rest of the fuel cycle as a target in latter stages. The Schleswig-Holstein state government has even declared its desire to close all three plants in its state (Brokdorf, Brunsbüttel, and Krümmel) as early as 1996.

Additionally, with reunification last October, the German government now must address the Soviet-designed East German reactors at Greifswald and Stendal. Even before unification, West German nuclear laws were adopted by East Germany. But as a result, all four plants at Greifswald were shut down because of safety concerns. The units at Stendal are under close scrutiny and will likely be shut down as well.

Despite all of this opposition and positioning by the state governments, the pro-nuclear federal government is working to convince the public of the benefits of maintaining the nuclear option for Germany.

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Italy

In November 1987, Italian voters approved an anti-nuclear referendum that resulted in a five-year moratorium on new nuclear facilities, and the shutdown of two operating units, Trino and Caorso. The units were initially in a cold shutdown, but a near-unanimous vote on June 12, 1990 by the Italian Parliament instructed the government to begin permanent decommissioning of the two units.

The moratorium expires in 1992, and nuclear proponents hope to have nuclear power reconsidered as an energy source at that time. The initial moratorium legislation allows for research to improve the safety of reactor designs. The national energy plan of Italy, recently passed in parliament after two years of debate, does not specifically exclude nuclear. Italy is participating in several passively-safe reactor design programs, and proponents are already formulating plans to have designs for these reactors ready for consideration when the moratorium expires.

The Netherlands

A bipartisan government, comprised of Christian Democrats and Social Democrats, was elected in the fall of 1989. The new government made no statements regarding nuclear power other than that the coalition would not consider the issue in the next four years. Both parties' platforms call for no new construction on any new nuclear facility. Debate on the issue has become more common, and supporters are now calling to reconsider the nuclear option in light of the threat of global warming. However, The Netherlands will likely continue its present course of not considering any new nuclear power projects in the next few years, thereby postponing any commercially operating plant at least until the next century.

Poland

In September 1990, as part of a new national energy plan, the Solidarity-led government of Poland voted to cancel the four-unit Zarnowiec station and place a ten-year moratorium on nuclear power. Construction of the first two units at Zarnowiec began in 1983, but due to delays and costs, were only about 20% complete.

The primary reasons for placing the moratorium on Zarnowiec and nuclear power were concerns about the safety of the Soviet-designed reactors, and very severe capital constraints. The new energy plan only defers nuclear; the government intends to reconsider the option in the future.

Soviet Union

The Soviet Union's nuclear program faces the same challenges of reactor safety, waste disposal, and public acceptance that face western nuclear programs. The Soviet government is still firmly committed to nuclear power because it realizes the country's dire need for clean, safe energy supplies to further economic growth. However, just as with other issues in the Soviet Union, individual republics have conflicting views of nuclear power and are resisting federal government mandates.

During 1990, the Ukrainian Parliament passed a five-year moratorium, halting all plans and construction on nuclear plants in the republic. While a ruling by a republic does not pre-empt federal regulations, it can be effective because the republic provides all of the local labor and supplies necessary for construction. The four completed nuclear stations (15 units) in the Ukraine continue to operate, and provide nearly 40 percent of the Soviet Union's nuclear generating capacity.

Russia, the Soviet Union's largest republic, has most of the country's fuel cycle facilities. In 1990, it declared that it would no longer accept spent fuel or waste from outside the republic. This statement by the Russian president, Boris Yeltsin, did not indicate if the republic intended to honor existing contracts or to stop all shipments immediately. Other, more pressing economic problems are getting priority at present, so shipments to Russia are continuing.

Spain

In 1983, Spain issued a national energy plan for 1983-1992. The plan significantly reduced projected electricity demand growth, so as a result, the government imposed a nuclear moratorium to avoid the construction of excess capacity. Spain had ten reactors operating when the moratorium was officially imposed. The moratorium also halted construction of the nearly-complete Lemoniz and Valdecaballeros reactors. This year, the government is once again preparing a new 10-year energy plan. Debate has already begun on whether to continue the moratorium or suspend it. Spain's ruling Socialist Worker's Party was supposed to address the issue at its November 1990 Congress. Instead, the party continued an ambiguous policy that nuclear power should eventually be replaced by other energy sources, but no firm decision will be made immediately. Thus, debate on the new national energy plan in the upcoming year will have to address the moratorium issue, and nuclear's fate in Spain will be decided politically.

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Sweden

Sweden's energy policy drew continued criticism in 1989 and 1990. The policy was not planned but rather, developed piecemeal in the early 1980s. A moratorium that called for the complete phase-out of nuclear power by 2010 was passed in 1980. Laws that limited increases in total CO_2 emissions, and that banned any new large-scale hydroelectric development were passed separately. The reality of eliminating current capacity and preventing new capacity from being constructed led to heavily-publicized debates of the defacto energy policy. The government finally appointed a committee in late 1989 to reconcile the various opposing viewpoints.

In January 1991, three of Sweden's major political parties—Social Democrat, Liberal, and Center—announced that they had reached an agreement on a plan to phase out nuclear power in their country. The agreement will delay the start of the phase-out into the next century. The validity of the phase-out date of 2010 is now in question. The agreement also calls for an investment of nearly US$1 billion in development of renewable energy sources and conservation measures. Additionally, the new strategy will change the policy on CO_2 emissions, calling for a strategy to stabilize the level of global warming emissions by the year 2000. The agreement must still be passed by parliament.

Switzerland

On September 23, 1990 Swiss voters went to the polls to vote on the country's third anti-nuclear referendum in just over 10 years. While the previous anti-nuclear referendums failed, a portion of this referendum was approved. The Swiss rejected a proposal that called for the progressive abandonment of nuclear power, but voters approved a 10-year moratorium on licensing and construction of new nuclear plants. Voters also approved the third portion of the referendum, which authorized the government to allocate funds toward investigating alternative energy sources, and to take a more active role in regulating energy consumption.

The election results were essentially a compromise by the voters—it did not shut down existing nuclear plants, but will stop additional construction of new plants and will examine other energy alternatives. The moratorium vote essentially formalizes the defacto moratorium that has been in effect in Switzerland since the Chernobyl accident; political developments since that accident have effectively stopped any progress on new plants. The Swiss government and most industrial and utility forces urged voters to turn down the entire initiative, but voters ended up approving what was in their view, a compromise alternative.

United Kingdom

The primary development in the UK energy sector in the last few years has been the privatization of the electricity supply industry. Nuclear power was originally included in the privatization plans, but many frustrating developments led to the government decision to withdraw it from the privatization initiative. The present UK government (Conservative Party) favors the continued development of nuclear power, but as a result of the privatization efforts, a four-year moratorium on new nuclear power construction has been imposed. The opposing Labor party has indicated that it will not support new nuclear plants, but it will not block the completion of the Sizewell B PWR plant or work in the reprocessing industry. The government has indicated that it will review the moratorium again in 1994.

Yugoslavia

The Yugoslavian government approved a nuclear moratorium in June 1989 that postpones the construction of any new nuclear power plants, and postpones any investment decisions on new construction until the year 2000. The law does not prohibit mining, geological work, scientific research, and siting studies for future nuclear plants and waste disposal facilities. The idea of the ban originated in the Republic of Slovenia, which passed a local construction moratorium in 1987. Studies by a government investigative committee showed that only a small percentage of Yugoslavia's other energy resources (hard coal, hydro) had been utilized. Thus, with all of the other economic and ethnic challenges facing the country, nuclear power will be a low priority until the moratorium expires in 2000.

ASIA

Japan

Japan still has one of the most aggressive and successful nuclear energy programs in the world. The government plans for the country's utilities to produce more than 40 percent of Japan's electricity from nuclear plants (up from 30 percent) within twenty years. However, equally aggressive anti-nuclear opposition has begun to emerge and may slow the rate of expansion. Public opinion has

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increasingly grown against nuclear power, and the recent incident at Mihama 2, although minor in scale, has further increased opposition.

In what was effectively a vote of confidence, residents of Aomori Prefecture turned out in strong numbers in early February to re-elect their incumbent, pro-nuclear governor. Governor Kitamura won his fourth term of office running against two opponents who campaigned to freeze or scrap the Rokkasho-mura fuel cycle complex under construction in Aomori Prefecture. Within the domestic nuclear industry, Governor Kitamura's re-election was viewed as overcoming an important obstacle in Japan's pursuit of self-sufficiency in the nuclear fuel cycle.

Philippines

The Philippines are in the midst of an energy crisis, yet, primarily for political reasons, the government will not authorize the completion and operation of the nearly-finished PNPP-1 nuclear power reactor. The government has expressed some anti-nuclear sentiment, but the primary reason for not operating the plant is that the current government alleges corruption and poor workmanship during the plant's construction under the previous regime. The mothballed 620-MWe PWR would take nearly two years before it could be ready to operate.

Taiwan

Taiwan's seventh and eight nuclear reactors were in the planning stages in 1983 when the government decided to delay any further work on the units. Public opposition to the units has gained strength in the 1980s, but the government is once again beginning to examine plans to restart the program. The government's Council for Economic Planning and Development even included construction of the units in its new six-year Economic Plan that began in 1991. Demand for electricity has continued to grow in Taiwan, and approximately one-third of its electricity comes from oil— much of it from Kuwait. Thus, electricity demand and conflicts in the Persian Gulf are forcing the government to re-examine the nuclear option, despite public opposition.

NORTH AMERICA

Canada

Canada is the world's largest uranium producer and the federal government continues to support nuclear power. But, as in many other countries, opposition within individual provinces is hindering a successful national nuclear program.

Ontario

The province of Ontario is the most populous and industrialized province in Canada. The province's primary utility, Ontario Hydro, announced in early 1990 a new 25-year energy plan that called for ten new 880-MWe Candu reactors, in addition to other energy sources. But, a surprising victory in the September provincial elections by the anti-nuclear New Democratic Party (NDP) has drastically altered Ontario Hydro's plans. Shortly after taking control of the government, the NDP imposed a moratorium on any additional nuclear plants in the province, and ordered Ontario Hydro to cancel all planning and advanced engineering work on the 10-plant nuclear plan. The government's freeze does not affect Ontario Hydro's planning and construction at its Darlington station, or the hearings on its 25-year demand/supply plan.

Saskatchewan

The Saskatchewan New Democratic Party (NDP) was in power from 1971 to 1982, and provided supportive legislation that was a key factor in the development of the province's uranium industry. The party still is quite powerful in the province and has adopted a policy opposing the use and development of nuclear power. Therefore, the party opposes any proposals for new nuclear power plants in the province. The party even stated that, as an example, it would neither fund nor license the 10-MWe Slowpoke reactor proposed for the University of Saskatchewan.

Nova Scotia, Newfoundland, and British Columbia

In early 1990, Novia Scotia decided to continue its moratorium on uranium exploration for another five years, but the exploration ban for other minerals was lifted. Newfoundland passed a 10-year nuclear moratorium in 1976, and renewed it in 1986. British Columbia's ten-year nuclear moratorium expired in 1986 and was not reinstated.

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United States

The USA was one of the first countries to experience localized opposition, and the legal environment in the USA has made completing and operating a new nuclear plant a political morass. On June 6, 1989, an anti-nuclear referendum that called for the closure of the Rancho Seco nuclear plant narrowly passed. The Sacramento Municipal Utility District (SMUD) closed down the plant the following day. The referendum was unusual because it applied to an already-operating plant and was primarily based upon economics (the plant's 15-year, average capacity factor was 38 percent). The utility is considering converting the plant to a gas-fired station.

Long Island Lighting Company's (LILCO) Shoreham nuclear plant has fought strong opposition since it began. The plant was eventually completed, but never received its full-power operating license. After years of legal battles, LILCO, with the approval of its shareholders, agreed to sell the unused plant for one dollar to the Long Island Power Authority. The effective sale of the plant to the city for decommissioning, was in exchange for guaranteed rate increases over the next ten years to recover most of the construction costs.

Pro-nuclear advocates, including the federal government, are fighting the LILCO sale to prevent the new plant from being dismantled. Thus, the legal battles are not yet over for Shoreham, though it is unlikely that the plant will ever operate as a nuclear unit.

On a more positive note, after a 17-year legal struggle, the Seabrook nuclear reactor in New Hampshire received its operating license in March 1990, and reached full power in July. The plant was hampered by many issues, including major regulatory delays, massive anti-nuclear protests, the refusal of neighboring Massachusetts to cooperate in emergency evacuation planning, operating license conflicts, and the bankruptcy of the reactor's primary owner, Public Service of New Hampshire. Despite the amount of attention the public gave the Seabrook plant, once the unit began operation, the issues quickly lost importance with the public. By July, polls showed that only six percent of New Hampshire residents considered Seabrook the state's most pressing problem (down from 33 percent).

Texas Utilities Electric Company received a full-power license for its Commanche Peak 1 reactor in April 1990. The reactor also had to overcome many problems, but by 1988 the last intervenor group had reached an agreement with the utility and the Nuclear Regulatory Commission (NRC). The unprecented agreement gives the intervenor (Citizens Association for Sound Energy) a place on the managing board of the unit and access to the site and to the utility's records. The plant reached commercial operation in July.

A final positive event occurred in November 1990 when Oregon voters elected to keep Portland General Electric's (PGE) Trojan nuclear power plant open. It was the second anti-nuclear referendum in four years for Oregon voters. The referendum, if passed, would have closed the plant until a federal repository for commercial reactor waste was opened. PGE's campaign to oppose the measure focused on the demand for electricity and on the economics of the issue. PGE estimated replacement electricity costs could go as high as $3 billion over twenty years.

CONCLUSION

Nuclear power has many obstacles to overcome if it is to regain the success it experienced in the 1960s and early 1970s. While many governments have taken some anti-nuclear actions, nearly all of them are keeping the nuclear option open, and many are reconsidering their policies this year. Successes with certain reactors in the USA, and in countries like France, South Korea, and Japan, demonstrate that opposition can be overcome through education and negotiation.

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CALENDAR

NUCLEAR INDUSTRY CALENDAR

1991

March 24-27 ***Fuel Cycle Conference '91*** (Sheraton Scottsdale Hotel, Phoenix, Arizona).
Sponsored by the U.S. Council for Energy Awareness.
Contact: USCEA Conference Office; 202-293-0770; Telex: 7108249602; Fax: 202-785-4113.

April 8-10 ***Japan Atomic Industrial Forum Annual Conference*** (Tokyo, Japan).
Contact: Japan Atomic Industrial Forum; 3-508-2411; or Fax: 3-508-2094.

April 14-17 ***INFO '91 Conference*** (The Westin Hotel, Chicago, Illinois).
Sponsored by the U.S. Council for Energy Awareness.
Contact: USCEA Conference Office; 202-293-0770; Telex: 7108249602; Fax: 202-785-4113.

April 14-18 ***Third International Conference on Nuclear Fuel Reprocessing & Waste Management*** (Sendai, Japan).
Sponsored by the Atomic Energy Society of Japan and the Japan Atomic Industrial Forum, and co-sponsored by the American Nuclear Society and the European Nuclear Society.
Contact: Japan Atomic Industrial Forum; 3-508-2411; or Fax: 3-508-2094.

April 21-24 ***International Topical Meeting on LWR Fuel Performance*** (Palais des Papes, Avignon, France).
Sponsored by the American Nuclear Society and the European Nuclear Society.
Contact: Fragema, BP3021, F69398 Lyon Cedex 03, France; Tel: (33) 74 72 8159; Fax: (33) 74 72 8760.

April 22-25 ***JAIF International Conference on Water Chemistry in Nuclear Power Plants*** (Fukui, Japan).
Contact: Japan Atomic Industrial Forum; 3-508-2411; or Fax: 3-508-2094.

May 2-3 ***Utility Nuclear Fuel Economics Group Meeting*** (Downtown Holiday Inn, Minneapolis, Minnesota).
Sponsored by Northern States Power.
Contact: David Austin; 612-330-7571.

May 8-10 ***Second International Conference on Transportation for the Nuclear Industry***
(Bournemouth, United Kingdom).
Co-Sponsored by the Institution of Nuclear Engineers, the European Nuclear Society, the American Nuclear Society, the Chartered Institute of Transport, and the Institution of Civil Engineers.
Contact: INE Conference Secretary; 081-698-1500 or 081-698-4750; Fax: 018-695-6409.

May 12-14 ***World Nuclear Fuel Market Annual Meeting*** (Atlanta, Georgia).
Contact: Donna Cason, World Nuclear Fuel Market; 404-447-1144.

May 14-16 ***Annual Meeting on Nuclear Technology '91*** (Hotel & Congress Center Maritim, Bonn, Germany).
Sponsored by the Kerntechnische Gesellschaft e.V. and the Deutsches Atomforum e.V.
Contact: INFORUM GmbH, Congress Office JK'91, Heussallee 10, D-5300 Bonn 1, or 0228/507 223.

June 2-6 ***American Nuclear Society Annual Meeting***
(Marriot Orlando World Center, Orlando, Florida).
Contact: ANS Meetings Department; 708-352-6611.

June 23-26 ***International Conference on Enrichment*** (The Westin Hotel, Washington, DC).
Sponsored by the U.S. Council for Energy Awareness.
Contact: USCEA Conference Office; 202-293-0770; Telex: 7108249602; Fax: 202-785-4113.

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Sept. 4-6 ***Uranium Institute Sixteenth Annual Symposium*** (London, UK).
Contact: Uranium Institute; 44-71-225-0303; or Fax: 44-71-225-0308.

Sept. 22-25 ***International Uranium Seminar '91*** (The Don Cesar Hotel, St. Petersburg/Tampa, Florida).
Sponsored by the U.S. Council for Energy Awareness.
Contact: USCEA Conference Office; 202-293-0770; Telex: 7108249602; Fax: 202-785-4113.

Sept. 29-Oct. 2 ***American Mining Congress Mining Convention*** (Salt Lake City, Utah).
Contact AMC Convention Office: 202-861-2800; or Fax: 202-861-7535.

Nov. 10-13 ***Nuclear Energy Forum*** (Westin St. Francis Hotel, San Francisco, California).
Sponsored by the U.S. Council for Energy Awareness.
Contact: USCEA Conference Office; 202-293-0770; Telex: 7108249602; Fax: 202-785-4113.

Nov. 10-15 ***American Nuclear Society Winter Meeting*** (Hilton Hotel, San Francisco, California).
Contact: ANS Meetings Department; 708-352-6611.

1992

April 12-16 ***8th Pacific Basin Conference*** (Taipei, Taiwan).
Sponsored by the Amercian Nuclear Society.
Contact: ANS Meetings Department; 708-352-6611.

Sept. 21-23 ***Second International Conference on Training for Operation & Maintenance in the Nuclear Industry***
(The Moat House International Hotel, Stratford-upon-Avon, United Kingdom).
Sponsored by the Institution of Nuclear Engineers.
Contact: INE Conference Secretary; 081-698-1500 or 081-698-4750; Fax: 018-695-6409.

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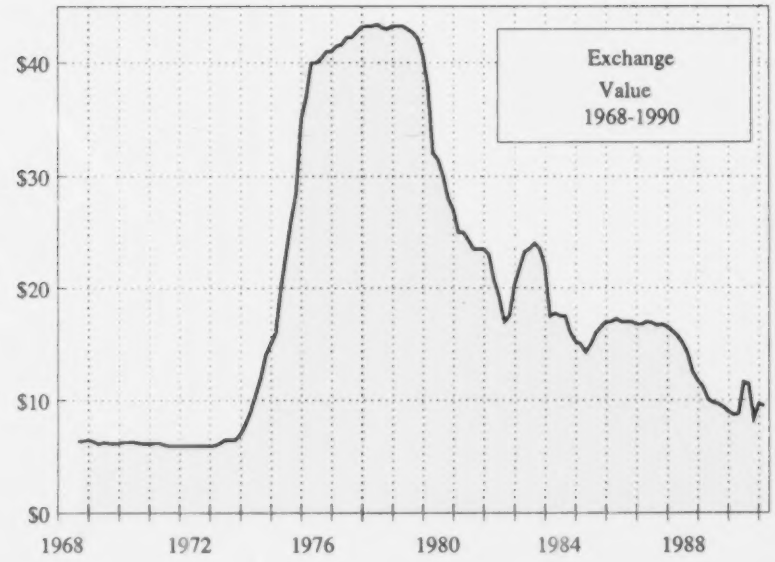
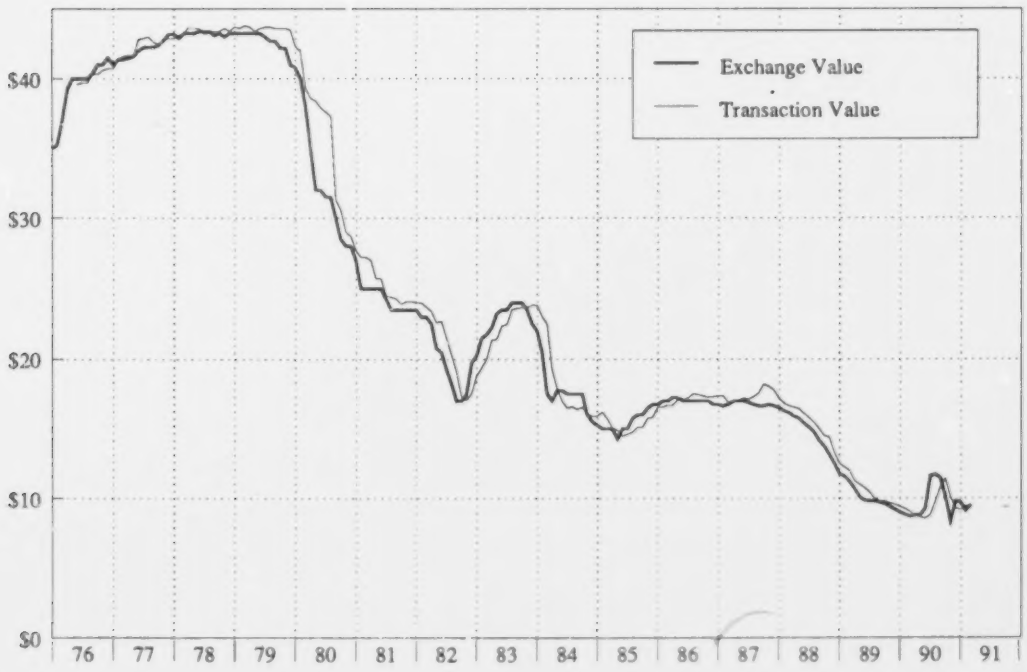
HISTORICAL MARKET DATA

NUEXCO Historical Exchange Value and Transaction Value
(in US dollars per Pound U_3O_8)





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HISTORICAL MARKET VALUES

Exchange Values

Year	Determined as of the last day of the month indicated ($US/lb U3O8)											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1968	—	—	—	—	—	—	—	6.35	6.35	6.40	6.45	6.50
1969	—	6.35	6.10	6.10	6.25	6.25	6.20	6.20	6.15	6.15	6.15	6.20
1970	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.20	6.15	6.15	6.15	6.15
1971	6.20	6.20	6.20	6.20	6.15	6.05	6.00	5.95	5.95	5.95	5.95	5.95
1972	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95
1973	5.95	6.00	6.10	6.20	6.45	6.50	6.50	6.50	6.50	6.50	6.75	7.00
1974	7.70	7.90	8.00	9.00	9.50	10.50	11.50	12.00	12.50	14.00	14.75	15.00
1975	16.00	16.00	18.00	20.00	21.00	23.00	24.70	26.00	26.00	28.50	30.00	35.00
1976	35.20	37.00	39.25	40.00	40.00	40.00	40.00	40.40	41.00	41.00	41.50	41.00
1977	41.35	41.50	41.60	41.60	42.00	42.25	42.25	42.25	42.40	42.75	43.20	43.20
1978	42.90	43.25	43.25	43.25	43.40	43.40	43.40	43.10	43.25	43.00	43.25	43.25
1979	43.25	43.25	43.25	43.25	43.25	43.00	42.70	42.70	42.20	42.20	41.00	40.75
1980	40.00	38.00	35.00	32.00	32.00	31.50	31.50	30.00	28.50	28.00	28.00	27.00
1981	25.00	25.00	25.00	25.00	25.00	24.25	23.50	23.50	23.50	23.50	23.50	23.50
1982	23.00	23.00	22.50	20.75	20.50	19.25	18.25	17.00	17.00	17.50	19.75	20.25
1983	21.50	21.75	22.25	23.25	23.50	23.50	24.00	24.00	24.00	23.50	22.50	22.00
1984	20.50	17.50	17.00	17.75	17.75	17.50	17.50	17.50	17.50	16.00	15.50	15.25
1985	15.00	15.00	15.00	14.25	15.00	15.00	15.75	16.00	16.00	16.50	16.75	17.00
1986	17.00	17.00	17.25	17.25	17.00	17.00	17.00	17.00	17.00	17.00	16.75	16.75
1987	16.65	16.75	17.00	17.00	17.00	16.90	16.75	16.65	16.65	16.75	16.65	16.55
1988	16.30	16.15	15.90	15.75	15.40	15.10	14.75	14.15	13.75	13.15	12.50	11.75
1989	11.60	11.20	10.70	10.10	9.85	9.80	9.80	9.70	9.60	9.40	9.20	9.00
1990	8.85	8.70	8.80	8.80	9.25	11.60	11.70	11.45	10.10	8.35	9.80	9.70
1991	9.10	**9.50**										

US Premium (Relative to the Exchange Value)

Year	Determined as of the last day of the month indicated ($US/lb U3O8)											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1986	—	—	—	—	—	—	—	—	—	—	0.65	0.75
1987	0.85	1.00	1.50	1.50	0.90	0.60	2.50	2.35	2.10	1.65	0.85	0.65
1988	0.70	0.50	0.15	0.25	0.60	0.00	0.00	0.00	0.00	0.00	**Discontinued**	

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HISTORICAL MARKET DATA

UF_6 Values

Year	Determined as of the last day of the month indicated ($US/kg U as UF6)											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1985	—	—	—	40.50	42.50	42.50	44.00	44.50	44.50	46.00	46.00	47.00
1986	47.00	48.00	48.00	48.50	48.25	48.25	48.25	48.00	48.00	48.00	48.00	47.75
1987	47.75	48.00	48.00	48.00	47.75	47.75	47.50	47.00	46.75	47.00	47.00	47.00
1988	46.50	46.00	45.50	45.25	44.75	44.00	42.75	41.00	40.75	39.00	37.50	35.50
1989	34.75	34.00	33.00	30.50	30.25	30.25	30.00	29.75	29.75	28.25	27.75	26.50
1990	25.90	25.25	24.40	24.40	25.50	32.00	32.50	32.25	29.50	24.75	28.75	28.75
1991	27.50	**27.75**										

US Premium (Relative to the UF_6 Value)

Year	Determined as of the last day of the month indicated ($US/kg U as UF6)											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1986	—	—	—	—	—	—	—	—	—	—	2.50	2.50
1987	2.50	2.50	3.50	3.00	2.25	1.75	6.50	6.00	4.25	3.10	2.25	2.00
1988	1.25	1.25	0.50	0.50	1.00	0.00	0.00	0.00	0.00	0.00	**Discontinued**	

Conversion Values

Year	Determined as of the last day of the month indicated ($US/lb U as UF6)											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1981	1.20	1.20	1.20	1.40	1.15	1.15	1.15	1.10	1.10	1.10	1.20	1.20
1982	1.20	1.20	1.20	1.20	1.00	1.00	1.00	0.90	1.10	1.60	1.45	1.45
1983	1.20	1.40	1.40	1.20	1.20	1.20	1.10	1.10	1.00	0.60	0.60	0.60
1984	0.60	0.30	0.80	0.80	0.80	0.00	0.00	0.80	1.00	1.00	0.80	0.80
1985	1.00	1.00	1.00	1.50	1.50	1.60	1.60	1.60	1.60	1.60	1.60	1.60
1986	1.60	1.80	1.90	1.80	1.80	1.80	1.80	1.90	1.90	1.90	1.80	1.80
1987	1.80	1.80	1.80	1.80	1.80	1.80	1.90	1.90	1.90	1.90	1.90	1.90
1988	1.90	1.80	1.80	1.80	1.80	1.80	1.85	1.95	1.95	1.95	1.95	1.95
1989	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.90	1.90	1.80	1.75	1.65
1990	1.50	1.50	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
1991	1.45	**1.45**										

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Transaction Values

Year	Determined as of the last day of the month indicated ($US/lb U3O8)											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1976	—	—	—	—	39.60	39.70	39.70	40.40	40.30	40.60	40.70	40.70
1977	41.30	41.30	41.40	41.50	42.80	42.90	43.00	42.60	42.50	42.80	42.90	42.90
1978	43.10	43.30	43.70	43.60	43.60	43.20	43.30	43.40	43.40	43.60	43.40	43.70
1979	43.60	43.80	43.70	43.40	43.60	43.70	43.70	43.60	43.60	43.60	43.50	42.30
1980	42.00	39.30	38.60	38.40	37.90	37.60	37.30	31.60	30.60	29.00	28.70	27.70
1981	27.20	27.20	27.00	25.70	25.70	24.50	24.40	24.30	23.90	24.10	24.10	24.00
1982	24.00	23.70	23.40	22.60	22.70	21.50	20.30	19.10	17.30	17.00	17.55	18.80
1983	19.35	20.00	21.35	21.40	22.35	22.45	23.50	23.60	23.65	23.65	23.85	23.85
1984	23.05	22.50	19.25	17.90	17.00	16.50	16.60	16.40	16.55	16.05	15.90	15.90
1985	16.20	15.70	15.05	14.90	14.45	14.60	14.75	15.10	15.10	15.75	15.80	16.55
1986	16.55	16.70	16.70	17.10	17.15	17.20	17.50	17.45	17.35	17.25	17.30	17.35
1987	17.35	16.90	16.95	17.00	17.20	17.10	17.30	17.55	18.20	18.05	17.80	17.20
1988	16.85	16.65	16.55	16.45	16.10	15.80	15.45	15.00	14.50	14.40	13.30	12.50
1989	12.25	12.00	11.25	11.00	10.75	10.45	9.95	9.80	9.80	9.65	9.55	9.40
1990	9.25	9.05	8.75	8.65	8.55	8.80	9.75	10.80	11.40	10.10	9.30	9.15
1991	9.40	**9.45**										

SWU Values

Year	Determined as of the last day of the month indicated ($US per SWU)											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1986	80	80	80	80	75	78	78	78	78	78	80	80
1987	80	80	77	77	75	73	75	75	73	69	73	73
1988	73	73	70	68	68	68	68	65	65	65	65	65
1989	65	67	67	67	66	66	66	65	63	59	57	54
1990	54	50	50	50	50	50	50	50	50	51	51	51
1991	51	**50**										

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HISTORICAL MARKET DATA

Loan Rates

Year	Determined as of the last day of the month indicated (Percent per Annum)											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1968	—	—	—	—	—	—	—	4.00	4.00	4.00	4.00	4.00
1969	4.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	6.00	6.00	6.00
1970	6.00	6.20	6.40	6.50	6.50	6.50	6.50	5.00	6.50	6.00	5.50	5.50
1971	5.00	4.75	4.75	4.75	5.00	5.25	5.25	5.25	5.25	5.25	4.50	4.50
1972	4.00	4.00	4.00	4.50	4.50	4.50	5.00	5.00	5.00	5.00	5.00	5.00
1973	5.50	5.50	5.75	5.75	6.00	6.25	7.00	7.00	7.00	7.00	7.50	8.00
1974	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
1975	8.00	7.00	7.00	7.00	7.00	6.50	6.50	6.50	6.50	6.50	6.50	6.50
1976	6.50	6.50	6.50	6.50	*	*	*	*	*	*	*	*
1977	*	*	*	*	6.50	6.50	6.50	6.75	7.25	7.25	7.25	7.25
1978	7.25	7.00	7.00	7.00	7.00	7.50	7.75	7.75	7.75	7.00	7.00	7.00
1979	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
1980	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
1981	7.00	7.00	7.00	7.00	7.00	5.50	5.50	5.50	5.50	6.00	6.00	6.00
1982	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
1983	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
1984	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
1985	6.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
1986	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
1987	3.00	3.00	3.00	3.00	3.00	3.00	3.00	4.00	4.00	4.00	3.50	3.50
1988	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
1989	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
1990	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
1991	3.50	**3.50**										

* Float with Prime Rate

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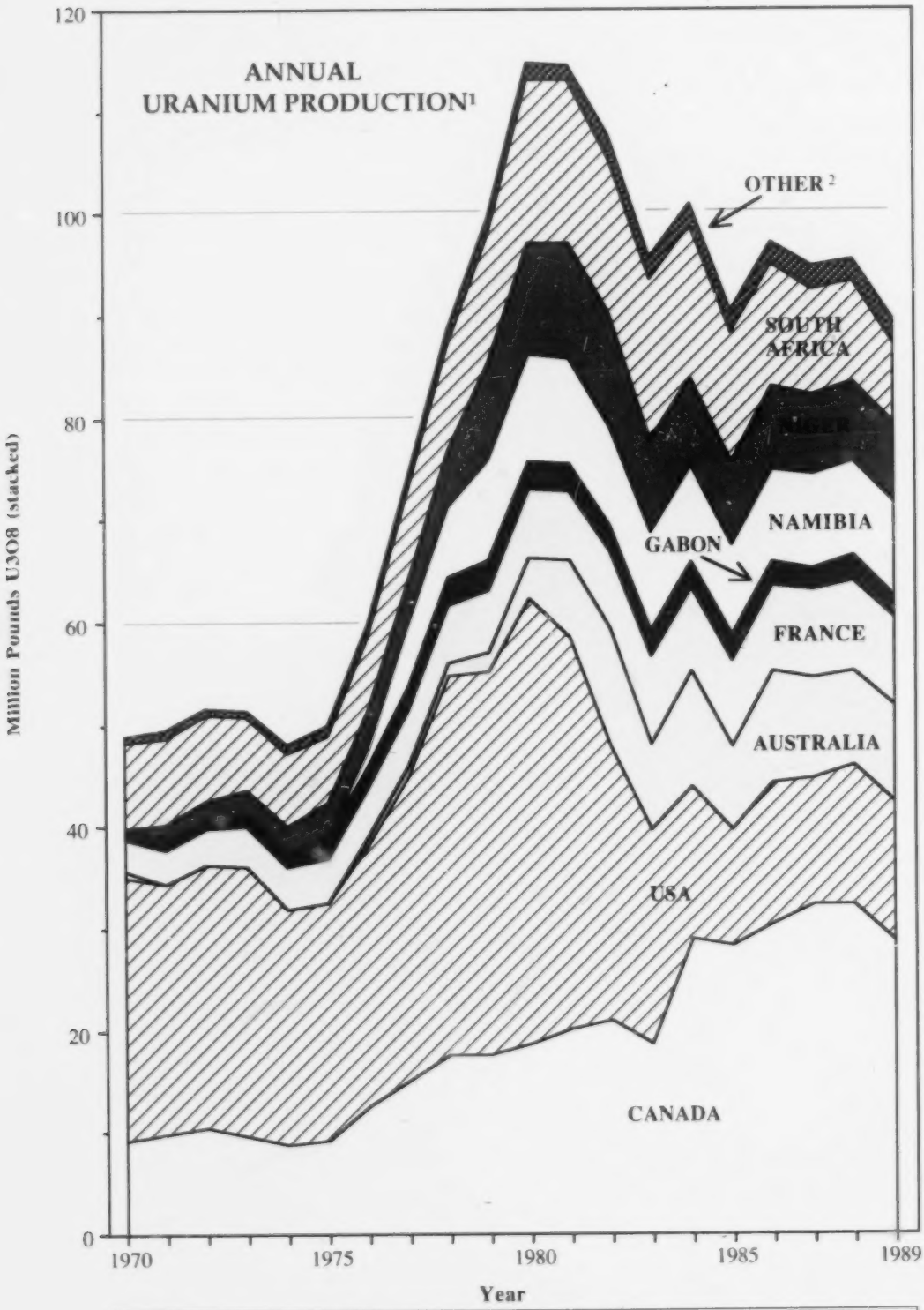

[1] Estimated world production in 1989 totalled 89.6 million pounds (Australia—9.5; Canada—28.7; France—8.5; Gabon—2.2; Namibia—9.2; Niger—7.7; South Africa—7.7; USA—13.7; Others[2]—2.3).

[2] **Other** includes: Argentina, Belgium, Brazil, India, Pakistan, Portugal, Spain, (West) Germany, and Yugoslavia

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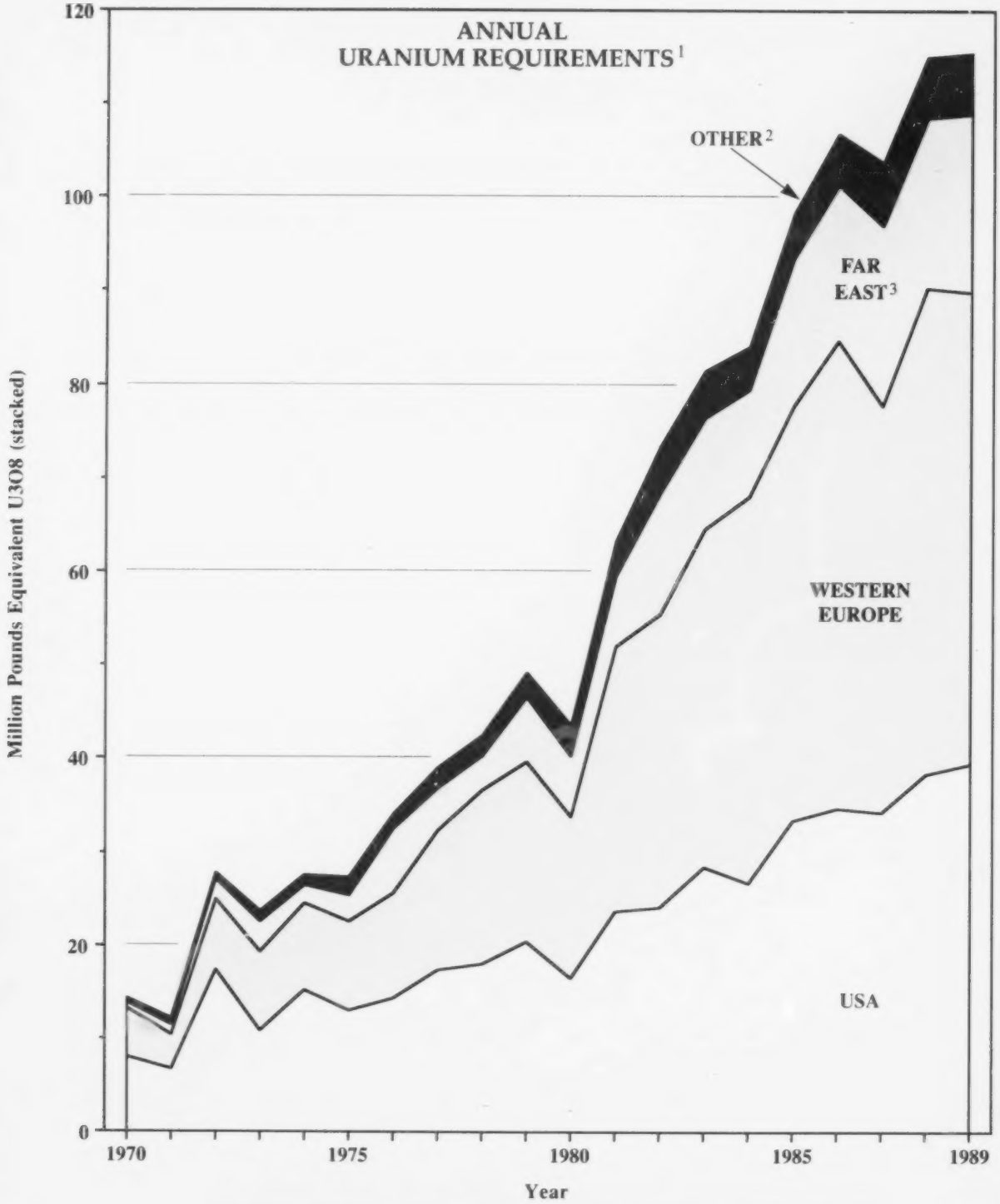
HISTORICAL MARKET DATA



[1] Calculated by NUEXCO based on actual completion dates and operating performance, and NUEXCO's estimate of enriching tails assays.

[2] **Other** include: Argentina, Brazil, Canada, India, Mexico, Pakistan and South Africa.

[3] Does not include Peoples Republic of China.

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Australia

Year	Period[1]	Consumer Price Index[2] (1980/1981 = 100)	Price Index of Materials Used in Manufacturing Industry — All Groups[3] (1984/1985 = 100)	Average Weekly Ordinary Time Earnings — Adult Males — Australia[4] (Australian dollars)	Award Rates of Pay Indexes Australia - Adult Males In Mining Wage Earners, Weekly Rates[5] (June 1985=100)
1980	Avg.	95.8	83.1	—	140.8[6]
1981	Avg.	105.0	85.9	—	154.1[6]
1982	Avg.	116.7	89.0	—	174.9[6]
1983	Avg.	128.5	96.9	—	181.9[6]
1984	Avg.	133.6	98.0	—	194.4[6]
1985	Avg.	142.6	107.3	—	103.7
1986	Avg.	155.5	101.5	—	106.1
1987	Avg.	168.7	108.9	465.88	112.3
1988	Avg.	180.9	111.8	496.90	115.2
1989	Avg.	194.6	117.0	534.65	126.0
Jan	1990	—	119.2	—	128.1
Feb	1990	—	120.8	555.80	128.2 R
Mar	1990	204.1	121.5	—	128.4 R
Apr	1990	—	119.9	—	128.6 R
May	1990	—	118.9	566.60	128.8
June	1990	207.4	116.6	—	129.2
July	1990	—	116.4	—	129.3 R
Aug	1990	—	122.4	574.10	129.4
Sept	1990	208.9	128.2	—	129.8 R
Oct	1990	—	134.1	—	129.9
Nov	1990	214.5	133.7	—	129.8
Dec	1990	—	—	—	129.9

P = Preliminary **R** = Revised since last month

[1] Monthly data for the period 1967 to 1986 appears in Report 233 (January 1988).
[2] Weighted average of six State capital cities (1975 to 1980), and eight capital cities from 1981 (Base: Financial year July 1980 to June 1981 = 100.0). Figures shown at end of quarter represent quarterly average.
[3] Australian Bureau of Statistics, Canberra: "Price Index of Materials Used in Manufacturing Industry" (Catalogue No. 6411.0).
[4] Australian Bureau of Statistics, Canberra: "Award Rates of Pay Indexes, Australia" (Catalogue No. 6312.0). Figures for the latest fourteen months shown are subject to revision.
[5] Australian Bureau of Statistics, Canberra: "Average Weekly Earnings, States & Australia" (Catalogue No. 6302.0).
[6] Base: June 1976 = 100.

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GOVERNMENT STATISTICS

Canada

		Industrial Products Price Index: All Commodities [1] (1986 = 100) [2]	Consumer Price Index: All Items (1986 = 100) [3]	Wage-earner Data: Average Hourly Earnings (C$) [4] Uranium Mines (SIC 057)	Metal Mines (SIC 051-059)	Mines, Quarries and Oil Wells (SIC 051-099)	Metal Rolling, Casting and Extruding (SIC 298)	Chemicals and Chemical Products Industries (SIC 372-379)
1980	Avg.	75.7	67.1	–·–	–·–	–·–	–·–	–·–
1981	Avg.	83.4	75.5	–·–	–·–	–·–	–·–	–·–
1982	Avg.	89.0	83.7	–·–	–·–	–·–	–·–	–·–
1983	Avg.	92.1	88.5	17.22	–·–	14.18	10.67	11.10
1984	Avg.	96.3	92.3	17.89	–·–	14.97	11.11	11.68
1985	Avg.	99.0	96.0	18.53	16.48	15.56	11.85	12.12
1986	Avg.	100.0	100.0	19.38	16.70	15.76	12.28	12.58
1987	Avg.	102.4	104.4	20.12	17.15	16.11	12.58	13.20
1988	Avg.	106.9	108.6	20.91	18.51	16.95	13.17	13.77
1989	Avg.	109.4	114.0	21.97	20.02	18.41	13.71	14.16
1990	Avg.	109.7	119.4	–·–	–·–	–·–	–·–	–·–
Jan	1990	108.7	116.9	21.88	20.39	19.03	13.99	14.78
Feb	1990	109.5	117.6	22.51	20.63	19.14	14.49	15.03
Mar	1990	109.3	118.0	22.52	20.75	19.17	14.99	15.07
Apr	1990	109.1	118.1	23.17	21.20	19.46	14.83	14.93
May	1990	109.6	118.7	23.28	20.55	19.01	14.71	15.06
June	1990	109.4	119.2	21.85	20.63	18.96	14.69	15.05
July	1990	109.1	119.8	20.92	20.18	18.66	14.34	15.20
Aug	1990	109.2	119.8	23.88	20.51	18.59	14.50	15.33
Sept	1990	110.2	120.2	24.41	21.19	18.94	14.48	15.63
Oct	1990	110.5R	121.2	23.11	21.39	19.12	14.78	15.59
Nov	1990	110.7	121.9	23.38R	21.83R	19.48R	14.93R	15.73
Dec	1990	110.7R	121.8	23.29P	21.66P	19.74P	14.70P	16.07P
Jan	1991	110.7R	125.0	–·–	–·–	–·–	–·–	–·–

P = Preliminary **R** = Revised since last month

[1] Statistics Canada, Prices Division, Ottawa: "Industry Price Indexes" (Catalogue 62-011). Indexes for the most recent six months shown are subject to revision. This category was formerly known as "Manufacturing." Monthly data for the period 1967 to 1986 is found in Report 233.

[2] New Base Year of 1986 as of Report 266. Previous Base Year was 1981. All figures in column recalculated by 0.791 multiplier.

[3] New Base Year of 1986 as of Report 264. Previous Base Year was 1981. All figures in column recalculated by 0.755 multiplier.

[4] Statistics Canada, Labour Division, Employment and Payrolls Section, Ottawa: "Employment, Earnings and Hours." Monthly data for the period 1983 to 1986 is found in Report 233.

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South Africa

		Average Declared Working Costs per Metric Ton of Gold Ore Milled [1] (Rand)	Tonnage-Weighted Index of Average Working Costs per Metric Ton of Gold Ore Milled [2] (March 1982 = 100)	Consumer Price Index [3] (1985 = 100)	Production Price Index All Groups [4] (1985 = 100)	Total Employment in Mining and Quarrying [5]	Total Salaries and Wages in Mining and Quarrying [5] (1,000 Rand)
							Annual Total [6]
1980	Avg.	35.53	—	51.9	55.2	709,042	2,237,689
1981	Avg.	41.89	—	59.8	62.7	722,918	2,756,928
1982	Avg.	47.25	104.2	68.6	71.4	702,041	3,181,584
1983	Avg.	51.88	115.0	77.1	79.0	700,901	3,563,282
1984	Avg.	58.95	130.3	86.0	85.6	711,511	4,134,390
1985	Avg.	68.76	151.6	100.0	100.0	724,587	4,778,612
1986	Avg.	80.22	177.9	118.6	119.5	756,637	5,767,950
1987	Avg.	95.01	223.1	137.7	136.2	751,864	6,911,395
1988	Avg.	106.69	241.1	155.4	154.1	705,355	7,774,054
1989	Avg.	116.65	273.0	178.2	177.5	700,360	8,833,934
1990	Avg.	129.37	305.3	203.8	199.4	—	—
							Monthly Total
Jan	1990	—	—	192.0	188.8	688,837	801,616
Feb	1990	—	—	193.3	190.3	674,026	767,274
Mar	1990	126.74	296.3	196.4	190.9	704,660	780,614
Apr	1990	—	—	198.3	194.1	696,107	810,474
May	1990	—	—	200.4	196.3	613,527	719,191
June	1990	128.25	299.87	201.8	197.0	676,621	841,165
July	1990	—	—	203.2	197.2	697,242	913,177
Aug	1990	—	—	206.5	199.8	686,385	902,392
Sept	1990	129.46	312.55	209.7	203.2	689,317 R	922,454 R
Oct	1990	—	—	211.1	206.1	676,833	882,603
Nov	1990	—	—	215.6	214.9	—	—
Dec	1990	133.02	312.37	217.1	214.7	—	—
Jan	1991	—	—	219.5	—	—	—

P = Preliminary R = Revised since last month

[1] Chamber of Mines of South Africa, Johannesburg: "Analysis of Working Results," published quarterly. Historical Data by month appears in Report 236.

[2] Page 16 of Report 178 contains description and calculation of index, and page 24 of Report 178 lists figures for 1982.

[3] Central Statistical Service, Pretoria: All income groups-weighted average, Historical Data by month appears in Report 236.

[4] Central Statistical Service, Pretoria: All commodities for consumption in South Africa.

[5] Central Statistical Service, Pretoria: Historical Data by month appears in Report 236.

[6] Annual total is shown, rather than monthly average, for indicated year.

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GOVERNMENT STATISTICS

United States

		Producer Price Index[1]		Consumer Price Index[2]	GNP Implicit Price Deflator[3]	Gross Average Hourly Earnings of Production or Non-supervisory Workers (US$)[4]			
		Industrial Commodities (1982 = 100)	All Commodities (1982 = 100)	(1982-1984 = 100)	(1982 = 100)	Metal Mining (SIC 10)	Primary Non-ferrous Metals (SIC 333)	Chemicals and Allied Products (SIC 28)	Electric and Electronic Equipment (SIC 36)
1980	Avg.	88.0	89.8	82.4	85.7	10.26	10.63	8.30	6.94
1981	Avg.	97.4	98.0	90.9	94.0	11.55	11.98	9.12	7.62
1982	Avg.	100.0	100.0	96.5	100.0	12.31	12.93	9.96	8.21
1983	Avg.	101.1	101.3	99.6	103.9	12.58	13.43	10.58	8.67
1984	Avg.	103.3	103.7	103.9	107.7	13.05	13.43	11.07	9.04
1985	Avg.	103.7	103.2	107.6	110.9	13.38	13.74	11.56	9.46
1986	Avg.	100.0	100.2	109.6	113.9	12.46	13.48	11.98	9.65
1987	Avg.	102.6	102.8	113.6	117.7	12.52	12.98	12.37	9.88
1988	Avg.	106.3	106.9	118.3	121.3	13.24	13.26	12.71	9.79
1989	Avg.	111.6	112.2	124.0	126.3	13.59	13.72	13.09	10.05
1990	Avg.	115.8	116.3	130.7	131.5	14.11P	14.36P	13.54R	10.37
Jan	1990	114.1	114.9	127.4	—	13.69	13.95	13.34	10.13
Feb	1990	113.6	114.4	128.0	—	13.70	13.99	13.27	10.16
Mar	1990	113.2	114.2	128.7	129.7	13.80	14.04	13.34	10.17
Apr	1990	113.2	114.1	128.9	—	13.92	14.30	13.53	10.17
May	1990	113.5	114.6	129.2	—	13.96	14.16	13.46	10.22
June	1990	113.2	114.3	129.9	131.0	14.00	14.31	13.51	10.27
July	1990	113.4	114.5	130.4	—	14.29	14.49	13.58	10.34
Aug	1990	115.9	116.5	131.6	—	14.27	14.60	13.57	10.33
Sept	1990	118.4R	118.4R	132.7	132.2	14.41	14.48	13.62	10.42
Oct	1990	121.3	120.8	133.5	—	14.43	14.58	13.72	10.47
Nov	1990	120.6	120.1	133.8	—	14.34R	14.73R	13.73	10.53R
Dec	1990	118.9	118.6	133.8	133.1	14.38P	14.67P	13.75R	10.57R
Jan	1991	118.3	118.9	134.6	—	—	—	13.82P	10.65P

P = Preliminary R = Revised since last month

[1] US Bureau of Labor Statistics, Washington, DC: "Producer Prices and Price Indexes," (formerly "Wholesale Prices and Price Indexes"). Producer Price Indexes are revised four months after they are first released to reflect the availability of late reports and corrections by respondents. Historical data is presented in Report 233.

[2] US Bureau of Labor Statistics, Washington, DC: Consumer Price Index for All Urban Consumers, US City Average, All Items. Historical data is presented in Report 233.

[3] US Department of Commerce, Washington, DC: Bureau of Economic Analysis, National Income and Wealth Division: "Survey of Current Business." The GNP Implicit Price Deflator is published quarterly, and seasonally adjusted. Historical data is presented in Report 233.

[4] US Bureau of Labor Statistics, Washington, DC: "Employment and Earnings." All data based on 1972 revision of SIC Manual. Historical data is presented in Report 233.

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Volume and Price of Uranium Deliveries To The European Community [1]

— Compiled from data published by the Euratom Supply Agency —

Year	Volume of Deliveries to the EC [2] (MTU)	Percentage of Deliveries Made Under Spot Contracts	Medium or Long-Term Contracts [3] Average Price		Spot Contracts [3] Average Price	
			in ECU per pound U_3O_8	in US Dollars per pound U_3O_8	in ECU per pound U_3O_8	in US Dollars per pound U_3O_8
1977	n/a	n/a	n/a	n/a	n/a	$41.00
1978	n/a	n/a	n/a	n/a	n/a	$43.00
1979	10,000	n/a	n/a	n/a	n/a	$44.50
1980	8,600	n/a	n/a	$36.00	n/a	$35.00
1981	13,000	less than 10	n/a	$33.25	n/a	$28.00
1982	12,500	less than 10	ECU 32.25	$32.00	ECU 24.25	$24.00
1983	13,500	less than 10	ECU 34.75	$31.00	ECU 26.00	$23.25
1984	11,000	less than 10	ECU 37.75	$29.75	ECU 24.50	$19.25
1985	11,000	11.5	ECU 38.00	$29.00	ECU 19.50	$15.00
1986	12,000	9.5	ECU 31.50	$31.00	ECU 18.00	$17.75
1987	14,000	17.0	ECU 28.25	$32.50	ECU 15.00	$17.25
1988	12,500	4.5	ECU 26.92	$31.82	ECU 13.65	$16.13
1989	13,500	11.5	ECU 26.63	$29.35	ECU 11.04	$12.19

P = Preliminary **R** = Revised since last month

[1] The twelve European Community member nations are Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, and the United Kingdom; prior to January 1986, Spain and Portugal were not members of the EEC.

[2] The only deliveries taken into account are those made to final users, namely the electric utilities or their procurement organizations; deliveries to middlemen or fuel cycle companies are not included. The sales between utilities in the Community are also excluded. The quantities covered are those which were entered into accounting records during the year stated.

[3] For deliveries made under medium or long-term contracts (i.e., for which the time between the date of signature and the date of the last delivery exceeds one year) the prices were expressed in seven different currencies. In order to calculate an average price, these prices have been converted into European Currency Units (ECU) and US dollars. The average prices were weighted by quantity and converted on the basis of the average annual exchange rate of the different currencies against the ECU and US dollar. Exchange rates are published by European Communities Statistical Office and the International Monetary Fund.

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GOVERNMENT STATISTICS

US Uranium Marketing Activities Statistics

— Compiled from data published by the US Energy Information Administration [1] —

Year	Total Production (million pounds U_3O_8)	Deliveries to Domestic Utilities From US Suppliers [2] (million pounds U_3O_8)	Average Price of Delivered Uranium [2] ($/lb. U_3O_8)	Quantity of Uranium Imported [3] (million pounds U_3O_8)	Average Price of Imported Uranium ($/lb. U_3O_8)	Quantity of Uranium Exported (million pounds U_3O_8)
1976	25.5	27.6	$16.10	3.6	n/a	1.2
1977	29.9	27.8	$19.75	5.6	n/a	4.0
1978	37.0	31.6	$21.60	5.2	n/a	6.8
1979	37.5	33.0	$23.85	3.0	n/a	6.2
1980	43.7	35.0	$28.15	3.6	$43.10	5.8
1981	38.5	32.6	$34.65	6.6	$32.90	4.4
1982	26.9	23.5	$38.37	17.1	$25.19	6.2
1983	21.2	24.2	$38.21	8.2	$26.16	3.3
1984	14.9	22.5	$32.65	12.5	$21.86	2.2
1985	11.3	21.7	$31.43	11.7	$20.08	5.3
1986	13.5	18.9	$30.01	13.5	$20.07	1.6
1987	13.0	20.8	$27.37	15.1	$19.14	1.0
1988	13.1	17.6	$26.15	15.8	$19.03	3.3
1989	13.8	18.4	$19.56	13.1	$16.75	2.1

P = Preliminary **R** = Revised since last month

[1] Sources: 1976-1983: US Department of Energy/Energy Information Administration, *Survey of United States Marketing Activity*.
1984-1989: Energy Information Administration, *Uranium Industry Annual*.

[2] Data for 1976-1981 includes both domestic utilities and agents.

[3] Includes imports by domestic utilities and domestic suppliers.

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